## APPENDICES I-III

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## Appendix I

```
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                    ***** END TRAIN.C
,
******************************/
void FindVariables()
short- x, n, i, k;
long nIn;
long NumPasses;
struct ddnet FAR *pnet;
float HHUGE *TrnData:
FILE *fLog;
FILE *fp;
FILE *fEnum;
       /* load the structures */
       dd get struct(NetNum, &pnet);
/* load the root network parameters */
       ypints (he not hetwise part, RootName);
dd reaf parms (NetNum, ParFileName);
sprints (ParFileName, "%s. typ", RootName);
sprints (TrnFileName, "%s.trn", RootName);
sprints (LogFileName, %s.trn", RootName);
       /* read the partameters for variable selection from .vsp file */
       fp = fopen (ParFileName, "r");
       if (fp == NULL) {
              printf ("could not open variable selection parameters file!
\n")
              return:
       fLog = fopen(LogFileName, "a");
       /* setup initial list */
       for(x=0; x<MaxVars; x++) ImpVar[x] = EXCLUDE;
       nAvailVa.rs = 0;
       /* nPartition = 5:
       fgets (str, 256, fp);
       nPartition = (short) atoi (str);
       fprintf (fLog, "nPartitions = %d\n", nPartition);
       printf ("nPartitions = %d\n", nPartition);
       /* nConsensus = 10; */
       fgets(str, 256, fp);
       nConsensus = (short)atoi(str);
       f-printf (fLog, "nConsensus = %d\n", nConsensus);
printf ("nConsensus = %d\n", nConsensus);
       /* nTop = 10; */
       fgets (str, 256, fp);
       nTop = (short)atoi(str);
fprintf (fLog, "nTop = %d\n",nTop);
printf("nTop = %d\n",nTop);
       /* pnet->TrainSize = 510; */
       fgets(str, 256, fp);
       pnet->TrainSize = atol(str);
       fprintf (fLog, "TrainSize = %1d\n",pnet->TrainSize);
```

```
printf ("TrainSize = $1d\n", pnet->TrainSize);
      /* pnet->Sigma[0] = (REAL)500; */
      fgets(str, 256, fp);
      pnet ->Sigma [0] = (REAL)atoi(str);
      fprintf (fLog, "report every %d passes\n", (int)pnet->Sigma[0]);
printf ("report every %d passes \n", (int)pnet->Sigma [0]);
      /* NumPasses = 999L; */
      fgets(str, 256, fp);
      NumPassas = atol(str);
      fprintf (fLog, "NumPasses = *1d\n", NumPasses);
      printf ("NumPasses = %ld\n", NumPasses);
      /* setup the ChiSq and SA lists */
      nAvailVars = 0;
      for (n=0; n<pnet->MaxPEs[0]; n++) {
             fgets(str, 256, fp);
ChiSqList[n] = (short)atoi(str);
             ImpVar[ChiSqList[n] - 1] = NORMUSE;
             SAList[n] = (short) atoi(strchr(str, ',') +1);
/* add code to never use these vars */
             if (SAList[n] < 0)
                    SAList[n] = SAList[n]
                    ImpVar[SAList[n] - 1] = NEVER;
             } else {
                    nAvailVars += 1;
             fprintf (fLog, "[%02d] ChiSq = %d SA =
%d\n", n,ChiSqList[n], SAList[n]);
printf ("%02d] ChiSq = %d SA = %d\n",n,ChiSqList[n],
SAList[n]);
      fprintf (fLog, "Availaable Variables = %d\n", n", AvailVars);
      for (n=0; n<nConsensus; n++) {
             fgets(str, 256, fp);
             Seeds[n] = atol(str);
             fprintf (fLog, [%02d] Seed = %1d\n", n, Seeds[n];
printf ("%02d] Seed = %1d\n", n, Seeds[n]);
      fclose (fLog);
      fclose(fp);
      /* load in the training data */
      MaxVars = pnet ->MaxPEs[0];
      ImpVarErr = (REAL) 9999.0;
      pnet->TestSize pnet->TrainSize / (long) nPartition;
      pnet->Learn.Flag = 1;
      dd_allocate_net(NetNum);
      /* set up special processing for inputs */
      dd set inputs func (NetNum, partition get input data);
      if (AllocTrn(NetNum, (short)1, (short) pnet->TrainSize+10) < 0) {
```

```
printf ("Error Allocating Training set! \n");
             exit(0):
      dd get trn array(NetNum, &TrnData);
      ReadTrnSet (NetNum, (short)1, (short)pnet->TrainSize, TrnFileName);
      pnet->TrainSize -= pnet->TestSize;
             /* copy ImpVar list to InputFunction list */
             fLog = fopen(LogFileName, "a");
             nIn = 0;
             for(x = 0; x < MaxVars; x++) {
                   if (ImpVar[x] == NORMUSE)
                          InputFunction[x] = NORMUSE;
                          nIn++;
                          printf ("1");
fprintf (fLog, "1");
                    } else if(ImpVar[x] NEVER) {
                          InputFunction[x] = EXCLUDE;
                          printf(".");
fprintf (fLog,".");
                    } else
                          InputFunction [x] = EXCLUDE;
                          printf("0");
fprintf(fLog, "0");
                    }
             printf(" initial selection \n");
             fprintf(fLog, " initial selection \n");
             fclose (fLog);
             if(nIn > 0) {
    /* train consensus of networks on the partitioned data */
                    TrainSelection(0,nIn,NumPasses);
                   ConsensusErr[0] /= (REAL)nConsensus;
ConsensusClass[0] /= (REAL)nConsensus;
                   printf("Initial Consensus Error %f Class %f \n",
                    (float)ConsensusErr[0], (float)ConsensusClass[0]);
flog = fopen(LogFileName, "a");
                    fprintf(fLog, "Initial Consensus Error %f Class %f \n",
                          (float) ConsensusErr[0], (float) ConsensusClass[0]);
                    fclose(fLog);
                   ImpVarErr = ConsensusErr[0];
/* open enumeration file for reading */
fEnum. = fopen ("Enum.1st", "r");
if (fEnum != NULL) {
      while (fgets (str, 256, fEnum) != 0) {
             /* generate the combination from the string */
             x = 0:
             for (k = 0; k < MaxVars; k++) {
                    if (str[k] == '0')
                          InputFunction[k] = EXCLUDE;
                          printf("0");
                    } else if (str[k] == '1')
                          InputFunction[k] = NORMUSE;
                          printf("1");
```

```
X++;
                     } else {
                            InputFunction[k] = EXCLUDE;
                            printf ("?");
             printf ("n");
              /* evaluate the combination */
             /* train consensus of networks on the partitioned data */
TrainSelection (0, (long) (x) NumPasses);
              /* statistics */
             ConsensusErr[0] /= (REAL) nConsensus;
ConsensusClass[0] /= (REAL) nConsensus;
              fLog = fopen (LogFileName, "a");
             for (i = 0; i < MaxVars; i++) {
                     if (InputFunction[i] == NORMUSE) {
                            printf ("%2d,",(int) i+1));
fprintf(fLog, "%2d, (int) (i+1);
             printf("Consensus Error %f Class %f \n",
                            (float) ConsensusErr[0], (float)
ConsensusClass[0]);
             fprintf (fLog, "Consensus Error %f Class %f \n",
                            (float) ConsensusErr[0], (float) ConsensusClass
[0]:
             fclose (fLog):
      fclose (fEnum);
#ifdef NOT
      for(x = 1; x \le nAvailVars; x++) 
      /* generate x at a time combinations */
/* initialize the array */
      for(i = 0; i < x; i++) {
    NewVar[i] = i;
       /* iterate through the combinations */
              /* set up InputFunction[] from NewVar[] */
             n = 0;
             k = 0;
              for(i = 0; i < MaxVars; i++)
                     InputFunction[i] = NORMUSE; /* EXCLUDE; */
                     if (ImpVar[i] == NEVER) {
                            InputFunctionc[i] = EXCLUDE;
                            continue:
                     if(k < x && NewVar[k] == n) {
                            InputFunction[i] = EXCLUDE; /* NORMUSE; */
                            k += 1:
                    n += 1;
```

```
/* evaluate the combination */
             /* train consensus of networks an the partitioned data */
             TrainSelection(0, (long) (nAvailVars - x) NumPasses);
             /* statistics */
             ConsensusErr[0] /= (REAL)nConsensus;
ConsensusClass[0] /= (REAL) nConsensus;
             fLog = fopen(LogFileName, "a");
             for(i = 0; i < MaxVars; i++) {
   if (InputFunction[i] == NORMUSE) {</pre>
                          printf ("%2d,", (int)(i+1));
fprintf (fLog, "%2d,", (int) (i+1));
printf ("Consensus Error %f Class %f \n",
                    (float) ConsensusErr[0], (float) ConsensusClass [0]);
             fclose(fLog);
             /* geneerate next selection */
             for(i = x-1; i>=0; i--) {
                   NewVar [i] ++;
                    for(k = i+1; k < x; k++)
                          NewVar[k] = NewVar[k-1] + 1;
                    if (NewVar[x-1] < nAvailVars) {
                          break:
       } while (NewVar[x-1] < nAvailVars);</pre>
#else
      /* start the process of generating the important variables */
      do {
             /* training data contains all variables */
             /* use special array for getting inputs to network */
             * determine the variables to use in the current run */
             /* build list from ChiSq and SA */
             nNewVar = 0;
             for (x = 0; x < MaxVars; x++) {
                   if (ImpVar [SAList [x] -1] == EXCLUDE) {
                          NewVar[nNewVar] = SAList[x] - (short) 1;
ImpVar[SAList[x] -1] = USED;
                          nNewVar++;
                   if (ImpVar [ChiSqList [x] -1] == EXCLUDE)
                          NewVar[nNewVar] = ChiSqList[x] - (short) 1;
                          ImpVar[ChiSqList[x -1] = USED;
                          nNewVar++;
                    if (nNewVar >= nTop) break;
             /* work through the list of new variables */
             fLog = fopen(LagFileName, "a");
             for (n = 0; n < nNewVar; n++) {
    /* copy ImpVar list to InputFunction list */
    nIn = 0;
```

```
for(x = 0; x < MaxVars; x++) {
                           if (ImpVar[x] == NORMUSE)
                                  InputFunction[x] = NORMUSE;
                                  nIn++:
                                  printf ("1");
                           f printf (fLog, "1");
} else if(ImpVar[x] == NEVER) {
                                  InputFunction[x] = EXCLUDE;
                                  printf(".");
                                  fprintf (fLog, ".");
                           } else }
                                  InputFunction[x] = EXCLUDE;
                                  printf ("0");
                                  fprintf(fLog, "0");
                    inputFunction [NewVar[n]] = NORMUSE;
                    nIn++;
             printf("...+ %d\n",NewVar[n]+1);
             fprintf(fLog, "...+ %d\n", NewVar[n]+1);
             fclose (fLog);
                    /* train consensus of networks on the partitioned data */
                    TrainSelection (n, nIn, NumPasses) ;
                    ConsensusErr[n] /= (REAL)nConsensus;
ConsensusClass[n] /= (REAL)nConsensus;
                    printf("Var %d Consensus Error %f Class %f \n",
(int) NewVar[n]+1.
                    (float)ConsensusErr[n], (float)ConsensusClass[n]);
f Log = f open (LogFileName, "a");
                    fprintf(fLog, "Var %d Consensus Error %f Class %f \n".
(int) NewVar[n] +1,
                           (float) ConsensusErr[n] . (float)
ConsensusClass[n]);
                    fclose (fLog);
             /* Test of the list of variables is complete */
             /* Find the best variable based an error */
             BestErr = (REAL) 999999.0:
             BestVar = -1;
             for(n=0; n< nNewVar; n++) {
    if (ConsensusErr[n] < BestErr) {</pre>
                           BestErr = ConsensusErr[n];
                           BestClass = ConsensusClass[n];
                           BestVar = NewVar[n];
             /* Is there a variable that improved the ImpVar list Error */
             /* Add the variable to the list of important variables */
             if(BestErr < ImpVarErr) {
    ImpVar[BestVar] = NORMUSE;</pre>
                    ImpVarErr = BestErr;
                    printf ("Added %d to Imp Var List Error = %f Class =
%f\n",
                           (int) BestVar+1, (float)BestErr, (float)
BestClass);
                    fLog = fopen (LogFileName, "a"):
                    fprintf (fLog, "Added %d to Imp Var List Error = %f Class
= %f/n".
```

Appendix II

```
Copyright (c) 1991-1995 Adeza Biomedical Corporation
FORM1.FRM - 1
 Neural Network, Function Declarations
Declare Function LoadNet% Lib "TKSDLL.DLL" (ByVal Net%, ByVal NetNameS)
Declare Function AllocNet% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function FreeNet% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function ReadWeights% Lib "TKSDLL.DLL" (ByVal Net%, ByVal NetNameS)
Declare Function LoadWeights% Lib "TKSDLL.DLL" (ByVal Net%, ByVal NetNameS)
Declare Function ReadParms% Lib "TKSDLL.DLL (ByVal Net%, ByVal NetNameS)
Declare Function LoadParms% Lib "TKSDLL.DLL" (ByVal Net%, ByVal NetNameS)
Declare Function WriteWeights% Lib "TKSDLL.DLL" (ByVal. Net%, ByVal
Net.NameS)
Declare Function SaveWeights% Lib "TKSDLL.DLL" (ByVal Net%, ByVal NetNameS)
Declare Function WriteParms% Lib "TKSDLL.DLL," (ByVal. Net%, ByVal
NetNameS)
Declare Function SaveParms% Lib "TKSDLL.DLL" (ByVal. Net%, ByVal NetNameS)
Declare Function PutInput# Lib "TKSDLL.DLL" (ByVal. Net%, ByVal. nIn%,
Declare Function PutState# Lib "TKSDLL.DLL" (BvVal Net%, BvVal Laver%,
Byval nSt%, pSt#)
Declare Function PutOutput# Lib "TKSDLL.DLL (ByVal Net*, ByVal nSt*, pSt#)
Declare Function PutTrn# Lib "TKSDLL.DLL" (ByVal Net%, ByVal nIn%, pIn#)
Declare Function PutWeight# Lib "TKSDLL.DLL" (ByVal Net%, ByVal Layer%,
ByVal pe%, ByVal nWt%, pWt#)
Declare Function PutParm# Lib "TKSDLL.DLL" (BvVal Net%, BvVal ParmNames,
ByVal Layer%, pWt#)
Declare Function GetInput# Lib "TKSDLL.DLL: (ByVal Net%, ByVal. nIn%)
Declare Function GetState# Lib "TKSDLL.DLL" (ByVal Net%, ByVal Layer%,
ByVal nSt%)
Declare Function GetOutput# Lib "TKSDLL DLL" (ByVal Net*, ByVal nSt*)
Declare Function GetWeight# Lib "TKSDLL.DLL" (ByVal Net%, ByVal Laver%,
ByVal pe%, ByVal nWt%)
Declare Function GetParm# Lib "TKSDLL.DLL" (ByVal Net%, ByVal ParmNameS,
ByVal Layer%)
Declare Function GetTrn# Lib "TKSDLL.DLL" (ByVal Net%, ByVal nIn%)
Declare Function GetNumInputs% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function GetNumOutputs% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function GetNumPEs% Lib "TKSDLL.DLL" (ByVal Net%, ByVal Layer%)
Declare Function GetNumLayers% Lib "TKSDLL.DLL (ByVal Net%)
Declare Function InitializeWts% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function Train.Net% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function IterateNet% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function IsNetAvail% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function PutGrade% Lib "TKSDLL.DLL" (ByVal Net%, pGrade#)
Declare Function GetWtsGrade# Lib "TKSDLL.DLL" (BvVal Net%)
Declare Function AdjustWts% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function GetBestWts% Lib "TKSDLL.DLL (ByVal. Net%)
Declare Function AllocTrn% Lib "TKSDLL.DLL" (ByVal Net%, ByVal
InclDesired%, ByVal NumExamples%)
Declare Function FreeTrn% Lib "TKSDLL.DLL" (ByVal Net%)
Declare Function Figure 110 TROUBLEDIT (DyVal Net*, ByVal InclDesired* ByVal Example*, ByVal Offset*, DVal#) Declare Function GetTrnData# Lib "TKSDLLDLL (ByVal Net*, ByVal Declare Function GetTrnData# Lib "TKSDLLDLL (ByVal Net*, ByVal
InclDesired%, ByVal Example%, ByVal Offset%)
Declare Function ReadTrnSet* Lib "TKSDLL.DLL" (ByVal Net*, ByVal
InclDesired%, ByVal NumExamples%, ByVal NetNameS)
Declare Function BatchTrain% Lib "TKSDLL.DLL (ByVal Net%, ByVal MaxPasses%,
pTargetError#)
```

```
FORM1.FRM - 2
'Variables
Dim Age
Dim NetAge #
Dim NetPacks#
Dim NetBirth#
Dim NetPreg#
Dim NetAbort#
Dim NetDiabetes#
Dim NetPregHTN#
Dim NetHxEndo#
Dim NetDysmen#
Dim NetPelPain#
Dim NetPAP#
Dim NetHxPelSur#
Dim NetMedHx#
Dim NetGenWarts#
Dim NetElisa#
Sub RunNets ()
         Con1 = 0
         Con2 = 0
         if NetElisa# = 0# Then
                  NetAge# = (Age - 32.07688) / 5.226876
                  For i = 0 To 7
                           a = PutInput (i, 1, NetAge#)
                           a = PutInput(i, 1, NetAge#)
a = PutInput(i, 2, NetDiabetes#)
a = PutInput(i, 3, NetPregHTN#)
a = PutInput(i, 4, NetPacks#)
a = PutInput(i, 5, NetPreg#)
a = PutInput(i, 6, NetBirth#)
a = PutInput(i, 7, NetAbort#)
a = PutInput(i, 7, NetAbort#)
b = PutInput(i, 7, NetAbort#)
                           a = PutInput(i, . 8, NetGenWarts#
a = PutInput(i, 9, NetPAP#)
a = PutInput(i, 10, NetHxEndo#)
                           a = PutInput(i, 11, NetHxPelSur#)
                           a = PutInput(i, 12, NetMedHx#)
a = PutInput(i, 13, NetPelPain#)
a = PutInput (i, 14, NetDysmen#)
                            a = IterateNet (i)
                           Con1 = Con1 + GetState(i, 3, 1)
Con2 = Con2 + GetState(i, 3, 2)
                  Next i
         Else
                  NetAge# = Age
                  For i = 8 To 15
                           a = PutInput(i, 1, NetAge#)
                           a = PutInput(i, 2, NetDiabetes#)
                           a = PutInput(i, 3, NetPregHTN#)
                           a = PutInput(i, 4, NetPacks#)
                           a = PutInput(i, 5, NetPreg#)
                           a = PutInput(i, 6, NetBirth#)
                           a = PutInput (i, 7, NetAbort#)
                           a = PutInput(i, 8, NetGenWarts#)
FORM1 FRM - 3
                           a = PutInput(i, 9, NetPAP#)
                           a = PutInput(i, 10, NetHxEndo#)
a = PutInput(i, 11, NetHxPelSur#)
a = PutInput (i, 12, NetMedHx#)
```

```
a = PutInput(i, 13, NetPelPain#)
a = PutInput(i, 14, NetDysmen#)
a = PutInput(i, 15, NetElisa#)
                      a = IterateNet(i)
                      Conl = Conl + GetState (i, 3, 1)

Con2 = Con2 + GetState (i, 3, 2)
              Next i
       End If
       Con1 = Con1 / 8
       Con2 = Con2 / 8
       Text2.Text = Con1
Text4.Text = Con2
       ' Generate Score
       If NetBlisa# = 0# Then
    Score = (Con1 - Con2) * 25
              Score = (Con1 - Con2) * 18
       End If
       Text8.Text = Score
End Sub
Sub Checkl_Click ()
       NetDiabetes# = 1# - NetDiabates#
       RunNets
End Sub
Sub Check2_Click ()
       NetDysmen# = 1# - NetDysmen#
       RunNets
End Sub
Sub Check3 Click ()
       NetPAP# = 1# - NetPAP#
       RunNets
End Sub
Sub Check4 Click ()
       NetPelPain# = 1# - NetPelPain#
       RunNets
End Sub
Sub Check5 Click ()
       NetHxPelSur# = 1# = NetHxPelSur#
       RunNets
End Sub
Sub Check6_Click ()
NetMedHx# = 1# - NetMedHx#
       RunNets
FORM1.FRM - 4
End Sub
Sub Check7 Click ()
       NetGenwarts# = 1# - NetGenWarts#
       RunNets
End Sub
```

```
Sub Check8_Click ()
      NetPregHTN# = 1# - NetPregHTN#
      RunNets
End Sub
Sub Check9_Click ()
      NetHxEndo# = 1# - NetHxEndo#
End Sub
Sub Command1_Click()
      Age = 30
      Text1.Text = Age
      NetAge# = (Age - 32.07688) / 5.226876
      NetPacks# = 0#
      Text3.Text = NetPacks#
      Text2.Text = "Not Run"
      Text4.Text = "Not Run"
      NetPreg# = 0#
      Text5.Text = NetPreg#
      NetBirth# = 0#
      Text6.Text = NetBirth#
      NetAbort# = 0#
      Text7.Text = NetAbort#
      NetElisa# = 0#
      Text7.Text = Net.Elisa#
      NetDiabetes# = 0#
      Check1.Value = 0
      NetPregHTN# = 0#
      Check8. Value = 0
      NetHxEndo# = 0#
      Check9.Value = 0
      NetDysmen# = 0#
      Check2.Value = 0
      NetPelPain# = 0#
      Check4.Value = 0
      NetPAP# = 0#
      Check3.Value = 0
      NetHxPelSur# = 0#
      Check5.Value = 0
      NetMedHx# = 0#
      Check6.Value = 0
      NetGenWarts# = 0#
      Check7.Value = 0
End Sub
FORM1.FRM - 5
Sub Command2 Click ()
      End
End Sub
Sub Form Load ()
      a = LoadNet(0, "pat07 0")
      If a <> 0 Then GoTo mess
a = LoadNet(1, "pat07_1")
If a <> 1 Then GoTo mess
```

```
a = LoadNet(2, "pat07_2")
If a <> 2 Then GoTo mess
      a = LoadNet(3, "pat07 3")
      If a <> 3 Then GoTo mess
      a = LoadNet(4, "pat07_4")
      If a <> 4 Then GoTo mess
a = LoadNet(5, "pat07_5")
      If a <> 5 Then GoTo mess
      a = LoadNet(6, "pat07 6")
      If a <> 6 Then GoTo mess
      a = LoadNet(7, "pat07_7")
If a <> 7 Then GoTo mess
      a = LoadNet(8, "crfe12 0")
      If a <> 8 Then GoTo mess
      a = LoadNet(9, "crfe12_1")
      If a <> 9 Then GoTo mess
      a =. LoadNet(10, "crfe12 2")
      If a <> 10 Then GoTo mess
      a = LoadNet(11, "crfe12 3")
      If a <> 11 Then GoTo mess
      a = LoadNet(12, "crfe12 4")
      If a <> 12 Then GoTo mess
      a = LoadNet(13, "crfe12 5")
      If a <> 13 Then GoTo mess
      a = LoadNet(14, "crfe12 6")
      If a. <> 14 Then GoTo mess
      a = LoadNet(15, "crfe12_7")
mess:
      If a <> 15 Then Text4.Text = a + "No GOOD"
      'initialize variables
      Age = 30
      Text1.Text = Age
      NetAge# = (Age - 32.07688) / 5.226876
      NetPacks# = 0#
      Text3.Text = NetPacks#
      Text2.Text = "Not Run"
      Text4.Text = "Not Run"
      NetPreg# = 0#
      Text5.Text = NetPreq#
      NetBirth# = 0#
      Text6.Text = NetBirth#
      NetAbort# = 0#
      Text7.Text = NetAbort#
      NetElisa# = 0#
      Text 9. Text = NetElisa#
FORM1.FRM - 6
      NetDiabetes# = 0#
      NetPregHTN# = 0#
      NetHxEndo# = 0#
      NetDysmen# = 0#
      NetPelPain# = 0#
      NetPAP# = 0#
      NetHxPelSur = 0#
      NetMedHx# = 0#
      NetGenWarts# = 0#
End Sub
Sub Text1 Change ()
```

```
Age = Val(Text1.Text)
      RunNets
End Sub
Sub Text1_LostFocus ()
      RunNets
End Sub
Sub Text3_Change ()
NetPacks# = Val(Text3.Text)
       RunNets
End Sub
Sub Text 3 LostFocus ()
      RunNets
End Sub
Sub Text5_Change ()
NetPreg# = Val(Text5.Text)
       RunNets
End Sub
Sub Text5 LostFocus ()
      RunNets
End Sub
Sub Text6_Change ()
NetBirth# Val (Text6.Text)
       RunNets
End Sub
Sub Text6_LostFocus ()
RunNets
End Sub
Sub Text7_Change ()
NetAbort# = Val (Text7.Text)
       RunNets
End Sub
Sub Text7_LostFocus ()
      RunNets
End Sub
FORM1.FRM - 7
Sub Text9_Change ()
If Val(Text9.Text) <= 0# Then
             NetElisa# = 0#
       Else
             NetElisa# = Log(Val(Text9.Text)
       End If
       RunNets
End Sub
Sub Text9 LostFocus ()
      RunNets
End Sub
```

#endif

```
Appendix III
Copyright (c) 1991-1995 Adeza Biomedical Corporation
           revised 7/1/95
aa nets.h
Copyright (c) 1991-1995 Logical Designs Consulting Inc.
/*This include file works for both DLL and DOS environments /*
/*The following define determines the floating point precision */
/* Do not change it unless you intend to all source files */
#define USE-DOUBLES
#ifdef USE DOUBLES
#define REAL double
#define SIG LIM1T 44.0
#else
#define REAL float
#define SIG LIMIT 30.0
#endif
/* The following prevents multiple inclusion of this header file */
#ifndef AA NETS H
#ifndef AA NETS H
/* The following prevents C++ compiler from mangling names */
#ifdef _cplusplus
extern "C" (
#endif /* -cplusplus */
#ifdef WINDOWS
#include <windows.h>
#endif
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
#include <string.h>
/* Uncomment the following to enable user messages */
#define AA ENABLE USER MESSAGES
#ifdef _WINDOWS
#ifdef _WIN32
#define HUGE
#define EXPORT
#else
#define HUGE huge
#define EXPORT _export
#endif
#else
typedef unsigned short HANDLE;
#define PASCAL
#ifdef MSC APPL
#include < malloc.h>
#include <comio.h>
#define HUGE huge
#define FAR far
#define EXPORT
```

```
#ifdef BC APPL
#include <alloc.h>
#include <comio.h>
#define FAR
#define HUGE huge
#define EXPORT
#endif
#ifdef SC_APPL
#include <dos.h>
#include <conio.h>
#define FAR
#define HUGE huge
#define EXPORT
#endif
#ifdef UNIX_ APPL
#define FAR
#define HUGE
#define EXPORT
#endif
#ifdef WD32 APPL
#include <conio.h>
#define FAR
#define HUGE
#define EXPORT
#endif
#endif
#define
            MAX LAYERS 5
#define
           NU14-NETS
                              32
struct ddnet {
      /* Network Description Parameters */
      long
                                                 /* network interconnection
                  NetArch;
arrangement */
                                                 /* The total number of
      long
                  nLayers;
layers in the net */
      long
                  MaxPEs[MAX LAYERS]
                                                 /* max Processing Elements
(for Mallocs)
                  nPEs[MAX LAYERS];
                                           /* number of hidden */
      long
      long
                  PEFunc [MAX LAYERS];
                                                 /* Processing Element
Fuinction */
                  PETrans [MAX LAYERS]
                                                 /* Processing Element
      long
Transfer Function */
                  oIn(MAX LAYERS];
                                           /* offset of Layer Inputs (init
      long
routine) */
                                           /* offset of Weights (from init
      long
                  oWts (MAX LAYERS];
routine)
      long
                  oOut (MAX LAYERS];
                                           /* Offset of Layer Outputs (init
routine) */
      long
                  nIn[MAX LAYERS];
                                           /* count of Layer Inputs (init
routine) */
      long
                  nWts[MAX LAYERS];
                                          /* total number of weights (init
routine)
                                    s */
/* 0=disable 1=enable */
/* parameter for batching */
      /* Network Training Parameters
      long
                  LearnFlag;
                  BatchSize;
      long
```

```
TrainSize;
      long
                                         parameter for preprocessing */
                                         parameter for preprocessing
                                                                       */
      long
                   TestSize:
                                            /* 0=No 1=Initialize weights
                   InitWtsFlag;
      long
      long
                   RandSeed;
                                          for random number generator */
                                     /*
                  NetErrorType;
                                         kind of error to minimize by net
      long
*/
      REAL.
                   ErrorTol:
                                      /*
                                         Error Tolerance for training
                                      /*
                                         Error Tolerance for training */
      REAL
                   InputNoise;
                  nTrialPEs:
                                     /*
                                         for growing algorithm, number of
      long
trial units
                  RcrOpsPerIter;
                                         ops per iteration for recurrent
      long
nets
      */
                   TrnSequence;
                                         order of presentation of training
      long
set
      long
                   TestWhileTrn;
                                         Controls processing fro training
and testing
                                      /* Method used to to classification
      long
                  ClassMethod;
performance measurement
                  NetRule[MAX_LAYERS];
                                                  /* weight adjustment by
      long
layer
                                                  /* for growing algorithms
                   IterLimit[MAX X LAYERS];
      long
only
      REAL
                   InitWtsVal[MAX_LAYERS]; /* multiplier for grand ( ) */
      REAL
                   XferOfs[MAX LAYERS];
                                                      offset for XferPrime
      PEAT.
                   PESigma (MAX LAYERS):
                                                Initial Sigma for L1, L2, RBF
 */
      REAL
                   PEMu[MAX LAYERS];
                                            /* Learning factor for PESigma
                   Alpha [MAX-LAYERS];
                                                  /* learning rule
      REAL
parameters
                                            /* Values dependent on learning
      REAL
                   Beta[MAX LAYERS];
rule used */
      REAL
                   Gamma [MAX LAYERS];
                   Delta[MAX LAYERS];
      REAL
                   Epsilon [MAX LAYERS];
      REAL
      REAL
                   Theta [MAX-YERS] :
      REAL
                   Lambda [MAX LAYERS];
      REAL.
                   Mu [MAX LAYERS] ;
      REAL
                   Sigma [MAX LAYERS];
      REAL
           WtsDecay (MAX LAYERS];
      /* Network pointers (not all are allocated for a given network)
                                                                          */
      REAL
                   HUGE
                         *pCurWts;
                                            /* pointer to current wieghts
                                            /* pointer to best wieghts */
/* pointer to spare weights */
      REAL
                   HUGE
                         *pBestWts;
      REAL
                   HUGE
                         *pGateWts;
                                            /* pointer to direction wieghts
      REAL
                         *pDirWts;
                   HUGE
      REAL
                   HUGE
                         *pBiasWts;
                                            /* pointer to bias weights */
                                            /* pointer to spare weights */
      REAL
                   HUGE
                         *pTempWts;
      REAL
                   HUGE
                         *pNetSts;
                                            /* pointer to the weighted sums
       */
states
      REAL
                   HUGE
                         *pASts;
                                            /* pointer to the states for PE
outputs */
                                            /* pointer to the states for PE
      REAL
                   HUGE
                         *pBSts;
outputs */
      REAL.
                   HUGE
                         *pDelSts;
                                            /* pointer to the states deltas
*/
      REAL
                   HUGE
                        *pTrnSts:
                                            /* pointer to the training states
*/
```

```
REAL
                   HUGE
                        *pErrSts;
                                           /* pointer to the Error stats */
      REAL
                   HUGE
                         *pPriorErrSts;
                                           /* pointer to the Prior Error
stats
       */
      REAL
                   HUGE
                         *pErrSumSts:
                                           /* pointer to the Error Sum stats
*/
      REAL
                   HUGE
                         *pBiasSts;
                                           /* pointer to the Bias stats
      REAL
                   HUGE
                         *pProbSts:
                                           /* pointer to the Prop stats
/* pointer to covariance by
      REAL
                  HUGE
                         *pCovMat;
output & trial unit */
      REAL
                  HUGE
                         *pLastCovMat;
                                           /* pointer to prior cov by output
& trial unit
      long
                  HUGE *poWts:
                                           /* pointer to weights offsets by
pe element */
      /* The following is to insure DLL compatibility
      HANDLE
                  hCurWts:
                              /* HANDLE to current wieghts */
                              /*
      HANDLE
                  hBestWts;
                                   HANDLE to best wieghts */
      HANDLE
                  hGateWts;
                              /* HANDLE to spare weights
                              /* HANDLE to direction wieghts
      HANDLE
                  hDirWts;
      HANDLE
                               /* HANDLE to bias weights */
/* HANDLE to spare weights */
                  hBiasWts:
      HANDLE
                  hTempWts:
                  hNetSts;
      HANDLE
                               /* HANDLE to the weighted sums states */
      HANDLE
                  hASts;
                                     /* HANDLE to the states for PE outputs
*/
      HANDLE
                  hBSts:
                                     /* HANDLE to the states for PE outputs
      HANDLE
                  hDelSts;
                               /* HANDLE to the states deltas */
                               /*
      HANDLE.
                                   HANDLE to the training states
                  hTrnSts;
                  hErrSts;
      HANDLE
                                   HANDLE to the Error stats */
      HANDLE
                  hPriorErrSts;
                                     /* HANDLE to the Prior Error stats */
      HANDLE
                  hErrSumSts; /*
                                   HANDLE to the Error Sum stats */
      HANDLE
                  hBiasSts;
                             /* HANDLE to the Bias stats */
                               /*
      HANDLE
                  hProbSts;
                                   HANDLE to the Prop stats */
                                  HANDLE to covariance by output & trial
      HANDLE
                  hCovMat:
                               /*
unit
      HANDLE
                  hLastCovMat;/* HANDLE to prior cov by output & trial
unit
      */
      HANDLE
                  hoWts:
                              /* HANDLE to weights offsets by pe element
*/
      /* Network Training Statistics and Globals
                                                 /* iteration count */
      long
                  Iteration:
      long
                  OperMode;
      long
                  TrialPick;
      long
                  CurCnt [MAX-LAYERS];
      long
                  TrainingMode;
                                                 /* In Training Testing or
Sensitivity analysis */
      long
                  TrnMaxErrSample;
                                                 /* Training Example with
Maximum Error */
     long
                  TrnClassCorrect;
                                                 /* Training set Correct
count
      */
     long
                  TstMaxErrSample;
                                                 /* Test Example with
Maximum Error
     long
                  TstClassCorrect:
                                                 /* Training set Correct
count
      */
     REAL
                  TrnError;
                                                 /* Training Set Error
Statistic */
     REAL
                  TrnMaxError:
                                                 /* Training Set Error
Statistic */
     REAL
                  TrnClassPercent:
                                                 /* Training Set Error
Statistic */
```

```
REAL
                    TstError;
                                                     /* Test Set Error Statistic
       REAL
                    TstMaxError;
                                                            /* Test Set Error
Statistic */
       REAL
                    TstClassPercent:
                                                     /* Test Set Error Statistic
*/
      REAL.
                    PETemp, MAX LAYERSI:
                                                     /* Temperature for Hopfield
MFA networks
       REAL
                    LastVal(MAX_LAYERS);
                                                     /* current step size */
                    CurTemp[MAX_LAYERS];
CurErr[MAX_LAYERS];
      REAL
      REAL
                                                     /* to error function value
*/
       REAL
                    LastErr (MAX LAYERS):
                                                     /* to error function value
*/
      REAL
                    BestErr[MAX LAYERS];
                                                     /* best error value */
};
#ifndef max
#define max(a,b)
                    (((a)>(b))?(a):(b))
#define min(a,b)
                    (((a)<(b))?(a):(b))
#endif
#ifndef fabs
#define fabs(a)
                    (((a) >= 0.0)?(a):(-a))
#endif
#ifndef ffsqn
#define ffsgn(a) (((a)>0.0)?(1.0):(((a)==0.0)?(0.0):(-1.0)))
#endif
/* DEFINES for input layer preprocessing */
#define
             NO_PREPROC
#define
             MEAN STD
#define
             MAX MIN
                                        2
#define
             SUM_1
                                 3
#define
             SUM SQ-1
                                        4
-/* DEFINES for Network Error, form
#define
             MEAN SO ERR
             MEAN_ABS_ERR
#define
#define
             HYPER SQ ERR
BI HYPER SQ ERR
                                        3
#define
             MEAN 4PW ERR
#define
                                        5
             CROS ENTROPY
#define
#define
             CLASS ERR
USER DEFINED
                                 7
#define
                                        8
/* DEFINES for Network Architecture
#define
             FEED FORWARD
             FF_CON_PRIOR
TOTAL_RCR
PRIOR_RCR
#define
                                        2
#define
                                 3
#define
#define
             CASCADE
                                        5
#define
             CASCADE RCR
                                 6
#define
             ELMAN RCR
                                 7
#define
             JORDAN RCR
                                 8
/* DEFINES for the PE Functions
#define
             DOT_PROD
L2_DIST
#define
                                        2
#define
             L1_DIST
                                        3
```

```
#define
              QUAD SUM
              RADIAL
#define
                                          5
#define
              SIGMA PI
GRNN SUM
                                          6
#define
                                          7
#ifdef
                     AG CUSTOM
              FUZZ APP
#define
                                          8
#define
              GEN_SIG_PI
                                   9
#endif
/* DEFINES for Transfer Functions
#define
              SIGMOID
#define
              BI_SIGMOID
#define
              ATAN
                                   3
              BI ATAN
#define
                                          4
#define
                                          5
#define
              BI SIN
                                          6
#define
              LINEAR
                                          7
#define
              THRES LINEAR
                                          8
#define
              BI THRES LINEAR THRESHOLD
#define
                                   10
#define
              BI THRESHOLD
                                          11
#define
              GAUSS
                                   12
#define
              CAUCHY
                                          13
#define
              WIN TAKE ALL
                                          14
#define
              PERIODIC SIN
                                          15
#define
              STCH THREES
                                   16
              STCH_BI_THRES
#define
                                          17
#define
              MFA_THRES
                                   18
#define
              MFA_BI_THRES
                                          19
/* DEFINES for Training set ordering
#define
              NORMAL
                                          0
#define
              RANDOM
                                         1
#define
              SHUFFLE
                                         2
#define
              TD REVERSE
                                   3
/* DEFINES for Learning Rules for NetRule [layer] */
#define
              NONE
#define
              BACK PROP
                                   1
              QUICK PROP
#define
                                   2
#define
             JACOBS PROP
KOHONEN WTA
                                   3
#define
                                   4
#define
              SIM ANNEAL
                                   5
#define
              RECURRENT BP
#define
              KOHONEN LVQ
                                   7
#define
             CASCADE CORR
SW RAND OPT
#define
                                   9
#define
              SIMPLEX SA
                                  10
#define
              POWELL OPT
                                   11
#define
             CONJ_GRAD
PROB_NET
                                   12
#define
                                         13
              GEN REG NET
#define
                                  14
#define
             LEVEN MARQ
                                  15
#define
             NUM ALGO
                                  16
/* DEFINES for CASCADE_CORR growing algorithms OperMode */
#define
             TRIAL ADJ
             OUTPUT_ADJ
GLOBAL_ADJ
MAX_CAPACITY
#define
                                  2
#define
                                  3
#define
```

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```
/* DEFINES for GRNN OperMode */
                                LOAD TRN
  #define
  #define
                                 SIGMĀ ADJ
  /* DEFINES for Classification Method */
                                BEST PICK
  #define
                                WITHIN TOL
  /* The following is defined when error message displays should be shown */
                                AA SHOW ERROR MESSAGES
 /* Error return codes */
  #define
                                AA ERROR NONE
                                                                                                                                              ٥
  #define
                                AA ERROR OPEN PARMS FILE
                                                                                                                                              -1
                                AA ERROR LOADING PARMS
AA ERROR CREATE PARMS FILE
AA ERROR SAVING PARMS
  #define
                                                                                                                               -2
 #define
                                                                                                                                              -3
 #define
                                                                                                                                              -4
                                AA ERROR NO EQUAL IN PARMS LINE
AA ERROR IDENTIFIER IN PARMS
 #define
                                                                                                                                              -5
 #define
                                AA_ERROR_OPEN_WEIGHTS_FILE
AA_ERROR_LOADYNG_WEIGHTS
 #define
                                                                                                                                              -7
 #define
                                                                                                                                              -8
 #define
                                AA ERROR CRE.ATE WEIGHTS FILE
                                                                                                                               -9
 #define
                                AA_ERROR_SAVING_WEIGHTS
                                                                                                                               -10
 #define
                                AA ERROR CRE.ATE WTS LOG FILE
AA ERROR SAVING WTS LOG
                                                                                                                               -11
 #define
                                                                                                                               -12
 #define
                               AA ERROR ALLOC
                                                                                                               -100
                               AA_ERROR_ALLOC_poWts
AA_ERROR_ALLOC_pNetSts
AA_ERROR_ALLOC_pASts
AA_ERROR_ALLOC_pBSts
 #define
                                                                                                               ( AA ERROR ALLOC
 #define
                                                                                                               ( AA_ERROR_ALLOC
                                                                                                                                                                             1 )
 #define
                                                                                                               ( AA_ERROR_ALLOC
( AA_ERROR_ALLOC
 #define
                               AA_ERROR_ALLOC_pDelsts
AA_ERROR_ALLOC_pTrists
AA_ERROR_ALLOC_pErrsts
AA_ERROR_ALLOC_pPriorErrsts
                                                                                                                                                                             3
 #define
                                                                                                               ( AA ERROR ALLOC
 #define
                                                                                                               ( AA_ERROR_ALLOC
 #define
                                                                                                               ( AA ERROR ALLOC
( AA ERROR ALLOC
                                                                                                                                                                             6
 #define
                               AA ERROR ALLOC pErrSumSts
AA ERROR ALLOC pBiasSts
AA ERROR ALLOC pProbSts
AA ERROR ALLOC pCovMat
 #define
                                                                                                               ( AA_ERROR_ALLOC
 #define
                                                                                                               ( AA ERROR ALLOC
                                                                                                                                                                             9)
 #define
                                                                                                               ( AA ERROR ALLOC
( AA ERROR ALLOC
                                                                                                                                                                             10
 #define
                                                                                                                                                                             11
                                AA ERROR ALLOC plastCovMat
 #define
                                                                                                             ( AA ERROR ALLOC
                                                                                                                                                                             12 )
                               AA ERROR ALLOC DCURWTS
AA ERROR ALLOC DBESTWTS
AA ERROR ALLOC DDIRWTS
 #define
                                                                                                               ( AA_ERROR_ALLOC
                                                                                                                                                                             13 )
 #define
                                                                                                               ( AA ERROR ALLOC
( AA ERROR ALLOC
                                                                                                                                                                             14 )
 #define
                                                                                                                                                                             15
                                                                                                                                                                                    )
                               AA ERROR ALLOC DBIASWTS (AA ERROR ALL
AA ERROR ALLOC DGATEWTS (AA ERROR AL
AA ERROR ALLOC DTEMPWTS (AA ERROR ALLCC DTEMPW
 #define
                                                                                                               ( AA_ERROR_ALLOC
                                                                                                                                                                             16
 #define
                                                                                                               ( AA_ERROR_ALLOC
                                                                                                                                                                             17 )
 #define
                                                                                                                                                             18 )
 /* function prototypes reference */
 /* Visual Basic and Excel functions specific to the DLL library */
short FAR PASCAL EXPORT LoadNet (short NetNum, char FAR *pName);
short FAR PASCAL EXPORT LoadWeights (short NetNum, char FAR *pName);
 short FAR PASCAL EXPORT ReadWeights (short NetNum, char FAR *pName);
 short FAR PASCAL EXPORT LoadParms (short NetNum, char FAR *pName);
short FAR PASCAL EXPORT ReadParms (short NetNum, char FAR *pName); short FAR PASCAL EXPORT AllocNet (short NetNum);
short FAR PASCAL EXPORT FreeNet (short NetNum);
short FAR PASCAL EXPORT SaveWeights (short NetNum, char FAR *pName);
Short FAR PASCAL EXPORT WriteHeights (Short NetNum, char FAR *Name);
short FAR PASCAL EXPORT WriteHeights (short NetNum, char FAR *pName);
short FAR PASCAL EXPORT SaveParms (short NetNum, char FAR *pName);
short FAR PASCAL EXPORT WriteHearms (short NetNum, char FAR *pName);
```

```
FAR PASCAL EXPORT PutInput (short NetNum, short nIn, double FAR
 double
 *pIn );
             FAR PASCAL EXPORT PutState (short NetNum, short layer, short
 double
 pe, double FAR *pSt);
double
             FAR PASCAL EXPORT Putoutput (short NetNum, short nSt, double
FAR *pSt);
double
             FAR PASCAL EXPORT PutTrn (short NetNum, short nSt, double FAR
 *pSt);
             FAR PASCAL EXPORT PutWeight (short NetNum, short layer, short
double
pe, short nWt, double FAR *pWt);
double
             FAR PASCAL EXPORT PutParm (short NetNum, char FAR *pName, short
layer, double FAR *pVal);
double
             FAR PASCAL EXPORT GetInput (short NetNum, short nIn);
double
             FAR PASCAL EXPORT GetState (short NetNum, short layer, short
nSt);
             FAR PASCAL EXPORT GetOutput (short NetNum, short nSt);
double
double
             FAR PASCAL EXPORT GetTrn (short NetNum, short nSt);
             FAR PASCAL EXPORT GetWeight (short NetNum, short layer, short
double
pe, short nWt);
double
             FAR PASCAL EXPORT GetParm (short NetNum, char FAR *pName, short
layer);
short FAR PASCAL EXPORT GetNumInputs (short NetNum);
short FAR PASCAL EXPORT GetNumOutputs (short NetNum);
short FAR PASCAL EXPORT GetNumPEs (short NetNum, short laver);
short FAR PASCAL EXPORT GetNumLayers (short NetNum);
short FAR PASCAL EXPORT InitializeWts (short NetNum);
short FAR PASCAL EXPORT TrainNet (short NetNum);
short FAR PASCAL EXPORT IterateNet (short NetNum);
short FAR PASCAL EXPORT IsNetAvail (short NetNum);
short FAR PASCAL EXPORT PutGrade (short NetNum, double FAR *pVal);
             FAR PASCAL EXPORT GetWtsGrade ( short NetNum);
double
short FAR PASCAL EXPORT AdjustWts (short NetNum);
short FAR PASCAL EXPORT GetBestWts (short NetNum);
short FAR PASCAL EXPORT AllocTrn (short NetNum, short InclDesired, short
nExamples):
short FAR PASCAL EXPORT FreeTrn (short NetNum);
double.
             FAR PASCAL EXPORT PutTrnData (short NetNum, short InclDesired,
short example, short offset, double FAR *pVal);
             FAR PASCAL EXPORT GetTrnData (short NetNum, short InclDesired,
double
short example, short offset):
short FAR PASCAL EXPORT ReadTrnSet (short NetNum, short InclDesired, short
MaxTrn, char FAR *pName );
short FAR PASCAL EXFORT BatchTrain ( short NetNum, short MaxPasses, double
FAR *TargetError );
/* user definable network evaluation function for graded and batched
learning */
void FAR PASCAL EXPORT eval_net (short NetNum, REAL *pRMSError, REAL
*pMaxError, REAL *pC lassError);
void FAR PASCAL EXPORT dd_set_inputs_func (short NetNum, long (FAR PASCAL
EXPORT *inputs_fn) (short NetNum, long example));
void FAR PASCAL EXPORT dd_set sample_func (short NetNum, void (FAR PASCAL
EXPORT *sample_fn) (short NetNum, long example));
void FAR PASCAL EXPORT dd_set_pass_func (short NetNum, void (FAR PASCAL
EXPORT *pass fn) (short NetNum) );
/* C language callable functions */
void
      FAR PASCAL dd_get_struct (short NetNum, struct ddnet FAR **pnet);
      FAR PASCAL dd_get_trn_array (short NetNum, float HUGE **ptrndata);
short FAR PASCAL dd_allocate net (short NetNum);
void FAR PASCAL dd_initialize_wts (short NetNum);
```

```
void FAR PASCAL
                      dd free net (short NetNum);
void
       FAR PASCAL
                      dd adjwts (short NetNum);
                      dd_train_network (short NetNum, long MaxPasses, double
void FAR PASCAL
TargetError);
void FAR PASCAL
                      dd_train_sa (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL
                     dd train swro (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL
                      dd_train_meb (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL
                      dd_train_pow (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL
                      dd_train_cg (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL dd_train_pnn (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL dd_train_grnn (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL dd train_lm (short NetNum, long MaxPasses, double
TargetError);
void FAR PASCAL dd_train_by_sample (short NetNum, long MaxPasses, double
TargetError):
void
       FAR PASCAL dd_train ( short NetNum );
void
       FAR PASCAL
                     dd_iterate (short NetNum);
void
       FAR PASCAL
                      dd preproc (short NetNum);
void
       FAR PASCAL
                      dd_gendir (short NetNum, short layer);
void
       FAR PASCAL
                      dd_bstwts (short NetNum, short layer);
void
       FAR PASCAL
                      dd curwts (short NetNum, short laver);
                     dd_otp_ff (short NetNum);
dd_otp_ffcp (short NetNum);
dd_otp_ti (short NetNum);
void
       FAR PASCAL
void
       FAR PASCAL
void
       FAR PASCAL
void
       FAR PASCAL
                      dd otp pi (short NetNum);
void
       FAR PASCAL
                      dd_otp_cas (short NetNum);
void
       FAR PASCAL
                      dd otp cas rcr (short NetNum);
                      dd_otp_elm_rcr (short NetNum);
void
       FAR PASCAL
void
       FAR PASCAL
                     dd otp jor rcr (short NetNum);
dd grad (short NetNum);
void
       FAR PASCAL
void
       FAR PASCAL
                     dd grad mse (short NetNum, short layer);
dd grad mae (short NetNum, short layer),
void
       FAR PASCAL
void
       FAR PASCAL
                     dd_grad_hse (short NetNum, short layer);
void
       FAR PASCAL
                     dd_grad_bhse (short NetNum, short layer);
void
       FAR PASCAL
                     dd_grad_m4pe (short NetNum, short layer);
dd_grad_ce (short NetNum, short layer);
       FAR PASCAL
void
void
       FAR PASCAL
                     dd_grad_y (short NetNum, short layer);
                     dd_grad_ff (short NetNum, short layer);
void
       FAR PASCAL
void
       FAR PASCAL
                     dd_grad_ffcp (short NetNum, short layer);
void
       FAR PASCAL
                     dd grad t rcr (short NetNum);
dd grad cas (short NetNum, short layer);
void
       FAR PASCAL
                     dd grad elm_rcr (short NetNum, short layer);
void
       FAR PASCAL
                     ad grad_elm_rcr (short methum, short layer);
ad grad_jor_rcr (short Methum, short layer);
ad adj_bp (short Methum, short layer);
ad adj_jacob (short Methum, short layer);
ad_adj_jacob (short Methum, short layer);
ad_adj_short short methum, short layer);
void
       FAR PASCAL
                     dd adj lvq (short NetNum, short layer)
dd adj sa (short NetNum, short layer);
dd adj swro (short NetNum, short layer);
void
       FAR PASCAL
void
       FAR PASCAL
void
       FAR PASCAL
void
       FAR PASCAL
                     dd grad cascor (short NetNum):
void
       FAR PASCAL
                     dd_adj_cascor (short NetNum);
void
      FAR PASCAL dd adj pnn (short NetNum);
FAR PASCAL dd adj grnn (short NetNum);
void
```

```
void FAR PASCAL
                      dd_adj_lm (short NetNum);
 void FAR PASCAL
                      dd parms (short NetNum);
                      dd load_parms (short NetNum, char *name);
 short FAR PASCAL
 short FAR PASCAL
                      dd_save_parms (short NetNum, char *name);
 short FAR PASCAL
                      dd_read_parms (short NetNum, char *name);
 short FAR PASCAL
                      dd_write_parms (short NetNum, char *name);
                      dd_load_wts (short NetNum, char *name);
 short FAR PASCAL
 short FAR PASCAL
                      dd_save_wts (short NetNum, char *name);
short FAR PASCAL
                      dd_read_wts (short NetNum, char *name);
short FAR PASCAL dd write wts (short NetNum, char *name);
void FAR PASCAL dd print weights (short NetNum.);
short FAR PASCAL dd log weights (short NetNum.);
void FAR PASCAL dd add pe (short NetNum, char *fname);
void FAR PASCAL dd add pe (short NetNum, long layer);
void FAR PASCAL generate offsets (short NetNum, long *pTotWts, long
*pMaxWts);
void FAR PASCAL user_message (char *str );
char
       FAR
              *dd_getmem ( HANDLE *pH, long len);
long layer,
               long Ofs,
               long cnt,
               double InitVal);
void FAR PASCAL XferFunc(
REAL HUGE *pIn,
               REAL HUGE *pOut,
               short
                           n,
               short
                             Type,
REAL *Temp);
void FAR PASCAL XferPrime(
               REAL HUGE *pI,
               REAL HUGE *pN,
               REAL HUGE *pO,
               short
                             n,
              short
void FAR PASCAL PeFunc (
              REAL HUGE *pIn,
               REAL HUGE **ppWts,
              REAL HUGE *pOut,
              short
                             nIn,
              short
                             nout.
              short
                             Type):
void FAR PASCAL Peprime (
              REAL HUGE *pIn,
              REAL HUGE *pErrIn,
              REAL HUGE *pWts,
              REAL HUGE *pDir,
              REAL HUGE *pErrOut,
              REAL HUGE *pMu,
              short
              short
                            nOut
              short
                            Type);
void FAR PASCAL vamul(
REAL HUGE *pA,
              REAL HUGE *pvA,
              REAL HUGE *pB,
              REAL HUGE *pC,
              long
                            _n)
double
              FAR PASCAL crand (void);
double
             FAR PASCAL grand(void);
```

```
void FAR PASCAL surand (long idum);
           FAR PASCAL urand (void);
FAR PASCAL xrand (void);
double
double
#ifdef _cplusplus
 #endif
#endif /* AA_NETS_H_ */
           ************
*******/
// mainfrm.cpp : implementation of the CMainFrame class
#include "stdafx.h"
#include "PTDinp.h"
#include "mainfrm.h"
#ifdef DEBUG
#undef THIS_FILE
static char BASED_CODE THIS_FILE[] = FILE;
#endif
// CMainFrame
IMPLEMENT_DYNCREATE (CMainFrame, CFrameWnd)
BEGIN_MESSAGE_MAP (CMainFrame, CFrameWnd)
     //{{AFX_M5G_MAP (CMainFrame)
          /7 NOTE - the ClassWizard will add and remove mapping macros
here.
                DO NOT EDIT what you see in these blocks of generated
code !
     ON WM CREATE()
     //}}AFX_MSG_MAP
END_MESSAGE MAP()
// arrays of IDs used to initialize control bars
// toolbar buttons - IDs are command buttons
static UINT BASED_CODE buttons[]
     // same order as in the bitmap 'toolbar.bmp'
     ID FILE OPEN.
    ID_SEFANCE.

ID_REC_FIRST,

ID_REC_FREV,

ID_REC_NEXT,

ID_REC_LAST,

ID_SEPARATOR,
          ID SEPARATOR.
     ID DATA EDIT,
```

```
ID DATA NEW,
          ID SEPARATOR.
      ID_REC_GOTO,
          ID SEPARATOR,
      ID_APP_ABOUT,
};
static UINT BASED_CODE indicators[] =
      ID SEPARATOR.
                         // status line indicator
     ID_INDICATOR_CAPS,
     ID_INDICATOR_NUM,
     ID INDICATOR SCRL,
};
// CMainFrame construction/destruction
CmainFrame::CmainFrame()
     // TODO: add member initialization code here
CMainFrame::~CmainFrame()
int CMainFrame::OnCreate(LPCREATESTRUCT lpCreateStruct)
     if
          (CframeWnd::OnCreate(1pCreateStruct) == -1)
          return -1;
     if
          (!m_wndToolBar.Create(this) ||
          !m_wndToolBar.LoadBitmap(IDR MAINFRAME) | |
          !m_wndToolBar.SetButtons(buttons,
               sizeof(buttons)/sizeof(UINT)))
          TRACE("Failed to create toolbar\n");
          return -1; // fail to create
     if
          (!m_wndStatusBar.Create(this) ||
          m_wndStatusBar.SetIndicators(indicators,
               sizeof(indicators)/sizeof(UINT)))
          TRACE("Failed to create status bar\n");
          return -1; // fail to create
     return 0;
// CMainFrame diagnostics
#ifdef DEBUG
void CMainFrame::AssertValid() const
    CFrameWnd::AssertValid();
```

```
void CMainFrame::Dump (CDumpContext& dc) const
     CFrameWnd::Dump(dc);
#endif // DEBUG
// CMainFrame message handlers
// mainfrm.h : interface of the CMainFrame class
11
class CmainFrame : public CFrameWnd
protected: // create from serialization only
    CmainFrame();
    DECLARE_DYNCREATE (CMainFrame)
//Attributes
public:
// Operations
public:
// Implementation
public:
    virtual ~CmainFrame();
#ifdef_DEBUG
    virtual void AssertValid() const;
    virtual void Dump (CDumpContext& dc) const;
#endif
protected: // control bar embedded members
    CStatusBar m_wndStatusBar;
    CToolBar
             m wndToolBar;
// Generated message map functions
protected:
    //{{AFX_MSG(CMainFrame)
    afx_msg int OnCreate(LPCREATESTRUCT lpCreateStruct);
    // NOTE - the ClassWizard will add and remove member functions here.
    // DO NO
        DO NOT EDIT what you see in these blocks of generated code!
    DECLARE_MESSAGE_MAP()
};
```

```
PTDDlgl.cpp : Defines the class behaviors for the application.
#include "stdafx.h'
#include ''PTDinp.h''
#include ''PTDDlql.h''
#ifdef
             DEBUG
#define new DEBUG NEW
#undef THIS FILE
static char THIS_FILE[] = _FILE_;
// CPTDInp dialog
CPTDInp::CPTDInp(CWnd* pParent /*=NULL*/)
      : CDialog(CPTDInp::IDD, pParent)
      //((AFX DATA INIT(CPTDInp)
      m_DATE_OF_BIRTH = "";
m_NAME_F = "";
      m NAME MI = "";
     m_1_COMP = FALSE;
m_2_COMP = FALSE;
m_3_COMP = FALSE;
m_4_COMP = FALSE;
      m 5 COMP = FALSE:
      m 6 COMP = FALSE;
     m_ACOG_N = FALSE;
m_ACOG_Y = FALSE;
m_Antibiotics = FALSE;
     m_AntiHyper = FALSE;
     m_CervCerclage = FALSE;
     m CervFirm = FALSE;
     m CervMod = FALSE;
     m CervSoft = FALSE;
     m_Corticosteroids = FALSE;
     m_Dilitation1_2 = FALSE;
m_Dilitation2 = FALSE;
     m_Dilitation2_3 = FALSE;
m_Dilitation3 = FALSE;
     m DilitationGt3 = FALSE;
     m_Dilitation1 = FALSE;
     m_DilitationLtl = FALSE;
     m_DilitationUkn = FALSE;
     m EGAatSample = "";
     m EGAbyLMP = "";
     m EGAbySONO = "";
     m EthnicOriginAsian = FALSE;
     m EthnicOriginBlack = FALSE;
     m EthnicOriginHispanic = FALSE;
     m_EthnicOriginNativeAmerican = FALSE;
     m_EthnicOriginOther = FALSE;
     m_EthnicOriginWhite = FALSE;
     m_FFN_Neg = FALSE;
m_FFN_Pos = FALSE;
     m GestationalDiabetes = FALSE;
     m_HypertensiveDisorders = FALSE;
```

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```
m Insulin = FALSE;
           m LadID = "";
           m MedicationNone = FALSE;
           m ModicationUnknown = FALSE;
           m MultipleGestationOuads = FALSE:
           m MultipleGestationTriplets = FALSE;
           m_MultipleGestationTwins = FALSE;
           m_MaritalStatusDivorced = FALSE;
           m MaritalStatusLWP = FALSE;
           m MaritalStatusMarried = FALSE;
           m_MaritalStatusOther = FALSE;
           m_MaritalStatusSingle = FALSE;
           m MaritalStatusWidowed = FALSE;
           m_MultipleGestation = FALSE;
           m_PatientCompl = FALSE;
           m_PatientComp2 = FALSE;
           m PatientComp3 = FALSE;
           m PatientComp4 = FALSE;
           m PatientComp5 = FALSE;
           m PatientComp6 = FALSE;
           m Tocolytics = FALSE:
           m UtCervAbnormal = FALSE:
           m_VaginalBleeding = FALSE;
           m_VaginalBleedingGross = FALSE;
m_VaginalBleedingMed = FALSE;
           m_VaginalBleedingTrace = FALSE;
           m 2 COMP 1 = FALSE;
m 2 COMP 2 = FALSE;
m 2 COMP 3 = FALSE;
           m ABORTIONS = "";
           m PARITY = "";
          m_PatCompl 1 3 = FALSE;
m_PatCompl 10 12 = FALSE;
m_PatCompl 4 6 = FALSE;
m_PatCompl 7-9 = FALSE;
m_PatCompl GT12 = FALSE;
m_PatCompl GT12 = FALSE;
m_PatCompl LT1 = FALSE;
m_GRAVITY = "";
           /7}}AFX DATA INTT
void CPTDInp::DoDataExchange(CDataExchange* pDX)
           CDialog::DoDataExchange(pDX);
           //{{AFX_DATA_MAP(CPTDInp)
          DDX Text (pDX, IDC DATE OF BIRTH, m DATE OF BIRTH);
DDX_Text (pDX, IDC_NAME F, m NAME F);
DDV_MaxChars (pDX, m_NAME_F, 24);
          DDX Text (pDX, IDC NAME L, m NAME L);
DDX Text (pDX, IDC NAME L, m NAME L);
DDV MaxChars (pDX, m NAME L, 24);
DDX Text (pDX, IDC NAME MI, m NAME MI);
DDV_MaxChars (pDX, M NAME MI, 2);
         DDV Check(pDX, DC 1 COMP, m 1 COMP);
DDX Check(pDX, IDC 1 COMP, m 1 COMP);
DDX Check(pDX, IDC 2 COMP, m 2 COMP);
DDX Check(pDX, IDC 3 COMP, m 3 COMP);
DDX Check(pDX, IDC 3 COMP, m 3 COMP);
DDX Check(pDX, IDC 5 COMP, m 4 COMP);
DDX Check(pDX, IDC 5 COMP, m 6 COMP);
DDX Check(pDX, IDC 6 COMP, m 6 COMP);
DDX Check(pDX, IDC 6 COMP, m 7 ACOG N);
DDX Check(pDX, IDC 7 ACOG Y, m 7 ACOG Y);
DDX Check(pDX, IDC 7 ACOG Y, m 7 ACOG Y);
DDX Check(pDX, IDC 7 ACOG Y, m 7 ACOG Y);
```

```
DDX_Check(pDX, IDC_ANTIHYPER, m_AntiHyper);
  DDX_Check(pDX, IDC_CERV_CERCLAGE, m CervCerclage);
  DDX_Check(pDX, IDC_CERV_FIRM, m CervFirm);
  DDX_Check(pDX, IDC_CERV_MOD, m_CervMod);
 DDX_Check(pDX, IDC_CRRV_SOFT, m_CervSoft);
DDX_Check(pDX, IDC_CRRV_SOFT, m_CervSoft);
DDX_Check(pDX, IDC_DILITATION_1_2, m_Dilitation1_2);
DDX_Check(pDX, IDC_DILITATION_2, m_Dilitation2);
  DDX_Check(pDX, IDC_DILITATION_2_3, m_Dilitation2_3);
 DDX Check(pDX, IDC DILITATION 3, m_Dilitation3);
DDX_Check(pDX, IDC_DILITATION_GT3, m_Dilitation6t3);
DDX_Check(pDX, IDC_DILITATION_1, m_Dilitation1);
  DDX_Check(pDX,IDC_DILITATION_LT1, m_DilitationLt1);
 DDX_Check (pDX, IDC_DILITATION_URN, m_DilitationUkn);
DDX_Text(pDX, IDC_EGA_AT_SAMP, m_EGAatSample);
DDV_MaxChars(pDX, m_EGAatSample, 10);
 DDX_Text(pDX, IDC_EGA_BY_LMP, m_EGAbyLMP)
 DDX_Text (pDX, IDC EGA BY SONO, m EGAbySONO)
 DDX_Check(pDX, IDC_BO_ASIAN, m_EthnicOriginAsian);
DDX_Check(pDX, IDC_BO_BLACK, m_EthnicOriginBlack);
DDX_Check(pDX, IDC_BO_HISPANIC, m_EthnicOriginHispanic);
 DDX_Check(pDX, IDC_EO_NATIVE_AMERICAN, m_EthnicoriginNativeAmerican);
DDX_Check(pDX, IDC_EO_OTHER, m_EthnicoriginOther);
 DDX Check (DDX, IDC EO WHITE, m EthnicOriginWhite);
DDX Check (DDX, IDC FFN NEG, m FFN Neg);
DDX Check (DDX, IDC FFN NEG, m FFN Neg);
DDX Check (DDX, DC FFN PGN, m FFN PGN);
DDX Check (DDX, DC GEST DIABETES, m GestationalDiabetes);
DDX_Check(pDX, IDC_HYPERTEN_DISORDERS, m_HypertensiveDisorders);
DDX_Check(pDX, IDC_INSULIN, m_Insulin);
DDX_Check(pDX, IDC_LAB_ID, m_LadID);
 DDX_Check (pDX, IDC_MED_NONE, m_MedicationNone);
 DDX_Check(pDX, IDC_MED UKN, m_MedicationUnknown);
DDX_Check(pDX, IDC_MG_QUADS, m_MultipleGestationQuads);
DDX_Check(pDX, IDC_MG_TRIPLETS, m_MultipleGestationTriplets);
DDX_Check(pDX, IDC_MG_TWINS, m_MultipleGestationTriplets);
 DDX_Check(pDX, IDC_MS_DIVORCED, m_MaritalStatusDivorced);
DDX Check(pDX, IDC MS LWP, m MaritalStatusMP);
DDX Check(pDX, IDC MS MARRIED, m MaritalStatusMarried);
DDX Check(pDX, IDC MS MARRIED, m MaritalStatusMarried);
 DDX_Check(pDX, IDC_MS_SINGLE, m_MaritalStatusSingle)
DDX Check (DDX, IDC MS WITDOWS), m MaritalStatusSindle);
DDX Check (DDX, IDC MS WITDOWS), m MaritalStatusWidowed);
DDX Check (DDX, IDC MWITT GBST, m MultipleGestation);
DDX Check (DDX, IDC DATIENT_COMP_1, m_PatientComp1);
DDX Check (DDX, IDC DATIENT_COMP_2, m_PatientComp2);
DDX Check (DDX, IDC DATIENT_COMP_3, m_PatientComp3);
DDX Check (DDX, IDC DATIENT_COMP_3, m_PatientComp3);
DDX Check (pDX, IDC PATIENT COMP 5, m_PatientComp5);
DDX Check (pDX, IDC PATIENT_COMP 5, m_PatientComp5);
DDX Check (pDX, IDC PATIENT_COMP 6, m_PatientComp6);
DDX_Check(pDX, IDC_PAILBNI_COMP_o, m_Patientcompo);
DDX Check(pDX, IDC_TCOOLYTICS, m_Tocolytics);
DDX_Check(pDX, IDC_UT_CMEV_ABNORM, m_UtCervabnormal);
DDX_Check(pDX, IDC_VAGINAL_BLEEDING, m_VaginalBleeding);
DDX_Check(pDX, IDC_WG_ROSS, m_VaginalBleedingdross);
DDX_Check(pDX, IDCVB_MED, m_VaginalBleedingMed);
DDX Check(pDX, IDC VB TRACE, m VaginalBleedingTrace);
DDX Check(pDX, IDC VB TRACE, m VaginalBleedingTrace);
DDX Check(pDX, IDC 2 COMP 1, m 2 COMP 1);
DDX Check(pDX, IDC 2 COMP 2, m 2 COMP 2);
DDX Check(pDX, IDC 2 COMP 3, m 2 COMP 3);
DDX_Text(pDX, IDC_ABORTIONS, m_ABORTIONS);
DDV_MaxChars(pDX, m_ABORTIONS, 2);
DDX_Text(pDX, IDC_PARITY, m_PARITY);
DDV MaxChars (pDX, m_PARITY, 2);
```

```
DDX Check(pDX, IDC PCl 1 3, m PatCompl 1 3); DDX Check(pDX, IDC PCl 10 12) m PatCompl 1 10 12); DDX Check(pDX, IDC PCl 4 8, m PatCompl 4 6); DDX Check(pDX, IDC PCl 7 9, m PatCompl 7 9); DDX Check(pDX, IDC PCl 7 9, m PatCompl 7 9); DDX Check(pDX, IDC PCl GTl2, m PatCompl GTl2); DDX Check(pDX, IDC PCl GTl2, m PatCompl GTl2); DDX Check(pDX, IDC PCl TL1, m PatCompl IT1); DDX Text(pDX, IDC GRAVIDITY, m GRAVITIY);
                        DDV MaxChars (pDX, m GRAVITY, 2);
                        //}\afx data map
BEGIN MESSAGE MAP(CPTDInp, CDialog)
                       //{{AFX MSG MAP(CPTDInp)
                       ON_WM_RBUTT5NDOWN()
                      ON BN CLICKED (IDC ACOG N, OnAcogN)
ON BN CLICKED (IDC ACOG Y, OnAcogY)
                       ON BN_CLICKED(IDC_FFN_NEG, OnFfnNeg)
                     ON BN CLICKED(IDC FFN POS, OnFfnPos)
ON BN CLICKED(IDC MG QUADS, OnMgQuads)
ON BN CLICKED(IDC MG TRIPLETS, OnMgTriplets)
ON BN CLICKED(IDC MC TWINS, ONMgTwins)
                       ON BN CLICKED (IDC MULT GEST, OnMultGest)
                     ON BN CLICKED (IDC DILITATION 1, OnDilitation1)
ON BN CLICKED (IDC DILITATION 1, OnDilitation1)
ON BN CLICKED (IDC DILITATION 1, OnDilitation1)
ON BN CLICKED (IDC DILITATION 2, OnDilitation2)
ON BN CLICKED (IDC DILITATION 2, ONDIlitation23)
                     ON BN CLICKED(IDC_DILITATION_3, OnDilitation3)
ON BN CLICKED(IDC DILITATION_3, OnDilitation3)
ON BN CLICKED(IDC DILITATION_3, OnDilitationGt3)
ON BN CLICKED (IDC DILITATION_LTI, OnDilitationLti)
ON BN CLICKED (IDC DILITATION_LTI, OnDilitationLti)
ON BN CLICKED (IDC CERV_FIRM, OnCervFirm)
                     ON BN CLICKED (IDC CERV MOD, ONCERVMOD)
ON BN CLICKED (IDC CERV SOFT, ONCERVSOFT)
ON BN CLICKED (IDC VAGINAL BLEEDING, ONVAGINALBLEEDING)
                    ON BN CLICKED(IDC VB GEOOS) ONVECTORS)

ON BN CLICKED(IDC VB MED. ONVEWED)

ON BN CLICKED(IDC VB MED. ONVEWED)

ON BN CLICKED(IDC VE TRACE, ONVETTACE)

ON BN CLICKED(IDC 2 COMP. ONZCOMP)

ON BN CLICKED(IDC 2 COMP. ONZCOMP)

ON BN CLICKED(IDC 2 COMP. ONZCOMP.)

ON BN CLICKED(IDC 2 COMP. ONZCOMP.)

ON BN CLICKED(IDC PC. OND S. ONZCOMP.)

ON BN CLICKED(IDC PC. ONZCOMP.)
                      ON BN CLICKED (IDC VB GROSS, OnVbGross)
                     ON BN CLICKED(IDC FCI GTIZ, ONFOIGTIZ)
ON BN CLICKED(IDC FCI LTI, ONFOILTI)
ON BN CLICKED(IDC EO ASIAN, ONFOASIAN)
ON BN CLICKED(IDC EO BLACK, ONFOBlack)
ON BN CLICKED(IDC BO BLACK, ONFOBLACK)
                     ON BN CLICKED(IDC SO RISPANIC, CHRONISPANIC)
ON BN CLICKED(IDC EO NATIVE AMERICAN, OnEoNativeAmerican)
                    ON BN CLICKED(IDC BO OTHER, ORBOOLEY)
ON BN CLICKED(IDC BO OTHER, ORBOOLEY)
ON BN CLICKED(IDC BO WHITE, ORBOWHITE)
ON BN CLICKED(IDC MS DIVORCED, ORMSDIVORCED)
ON BN CLICKED(IDC MS DIVORCED, ORMSDIVORCED)
                    ON BN_CLICKED(IDC_MS_MRRIED, ONMSMARTIED)
ON BN_CLICKED(IDC_MS_OTHER, ONMSOCHEY)
ON BN_CLICKED(IDC_MS_SINGLE, ONMSSINGLE)
ON_EN_CLICKED(IDC_MS_WIDOWED, ONMSWIGOWED)
                     //}}AFX_MSG_MAP
```

```
END MESSAGE MAP()
// CPTDInp message handlers
BOOL CPTDInp::OnInitDialog()
      CDialog::OnInitDialog();
      // TODO: Add extra initialization here
      //MoveWindow(0,-250,500,500);
                                        // one way to handle large
dialogs
      return TRUE;
                             // return TRUE
                                              unless you set the focus to
a control
void CPTDInp::OnRButtonDown(UINT nFlags, CPoint point)
      // TODO: Add your message handier code here and/or call default CRect
           GetWindowRect (&rect);
rect;
     CRect Desk;
     GetDesktopWindow( ) ->GetWindowRect (&Desk);
      //char str[256];
      //sprintf (str, "t %d 1 %d b %d r %d \n t %d 1 %d b %d r %d ",
           rect. top, rect.left, rect. bottom, rect. right,
Desk.top, Desk.left, Desk.bottom, Desk.right);
      11
      //AfxMessageBox(str);
     if(rect.top < 0 ) {
    rect.bottom = rect.bottom - rect.top;</pre>
           rect.top = 0;
           MoveWindow(rect);
      } else if (rect.bottom > Desk.bottom) {
           rect.top = Desk.bottom - 3 - (rect.bottom - rect.top);
           rect.bottom = Desk.bottom 3;
           MoveWindow(rect);
     CDialog::OnRButtonDown(nFlags, point):
void CPTDInp::OnAcogN()
     // get current values from dialog
     UpdateData(TRUE);
     if (m ACOG N) {
           m \overline{ACCOG} Y = FALSE:
     // update dialog with new data
     UpdateData (FALSE) ;
void CPTDInp::OnAcogY()
     // get current values from dialog
     UpdateData (TRUE) :
     if(m_ACOG_Y) (
```

```
m ACOG N = FALSE:
       // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnFfnNeg()
      // get current values from dialog
      UpdateData(TRUE);
      if(m_FFN_Neg) {
    m FFN Pos = FALSE;
      // update dialog with new data
      UpdateData (FALSE) ;
void CPTDInp::OnFfnPos()
      // get current values from dialog
      UpdateData(TRUE);
      if (m FFN Pos) {
             m_FFN_Neg = FALSE;
      // update dialog with new data
      UpdateData(FALSE):
}
void CPTDInp: : OnMgQuads()
      // get current values from dialog
      updateData(TRUE);
      if (m_multipleGestationQuads) {
             m_MultipleGestation = TRUE;
      ..._nattrprecestationTwins = FALSE;
m_MultipleGestationTriplets = FALSE;
} else (
             m MultipleGestationTwins = FALSE;
             if (m MultipleGestationTwins ++ FALSE &&
                   m_MultipleGestationTriplets == FALSE ) {
                   m MultipleGestation = FALSE;
             }
      }
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnLMqTriplets()
      // get current values from dialog
      UpdateData(TRUE);
```

```
if (m MultipleGestationTriplets) {
            m_MultipleGestation = TRUE;
            m_MultipleGestationQuads = FALSE;
            m MultipleGestationTwins = FALSE;
      } else }
            if ( m_MultipleGestationQuads == FALSE &&
                  m_MultipleGestationTwins == FALSE ) {
                  m MuItipleGestation = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OriMgTwins()
      // get current values from dialog
      UpdateData (TRUE);
      if (m MultipleGestationTwins)
            m_MultipleGestation = TRUE;
            m MultipleGestationQuads = FALSE;
            m MultipleGestationTriplets = FALSE;
      } else 7
            if ( m_MultipleGestationQuads == FALSE &&
                  m_MultipleGestationTriplets == FALSE ) {
                  m MultipleGestation = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnMultGest()
      // get current values from dialog
      UpdateData (TRUE);
      if (m_MultipleGestation) {
            if(((CPTDinpApp*)AfxGetApp())->ClearSubfields) {
                  m MultipleGestationQuads = FALSE;
                  m_MultipleGestationTriplets = FALSE;
                  m MultipleGestationTwins = FALSE:
      // update dialog with new data
      UpdateData(FALSE);
}
void CPTDInp::OnDilitation1()
      // get current values from dialog
      UpdateData(TRUE);
```

```
if (m Dilitation1) {
            m_Dilitation1_2 = FALSE;
            m Dilitation2 = FALSE;
            m_Dilitation2_3 = FALSE;
            m Dilitation3 = FALSE;
            m DilitationGt3 = FALSE;
            /7m_Dilitation1 = FALSE;
            m DilitationLt1 = FALSE;
            m_DilitationUkn = FALSE;
      // update dialog with new data
      UpdateData (FALSE) ;
}
void CPTDInp::OnDilitation12()
      // get current values from dialog
      UpdateData(TRUE);
      if (m Dilitation1 2)
            //m_Dilitation1 2 = FALSE;
            m_Dilitation2 = FALSE;
            m_Dilitation2_3 = FALSE;
            m_Dilitation3 = FALSE;
            m DilitationGt3 = FALSE;
            m_Dilitation1 = FALSE;
            m DilitationLt1 = FALSE;
            m_DilitationUkn = FALSE;
      // update dialog with new data
      UpdateData (FALSE) ;
void CPTDInp::OnDilitation2()
      // get current values from dialog
      UpdateData(TRUE);
      if (m_Dilitation2)
            m_Dilitation1_2 = FALSE;
            //m_Dilitation2 = FALSE;
            m_Dilitation2_3 = FALSE;
m_Dilitation3 = FALSE;
            m DilitationGt3 = FALSE:
            m_Dilitation1 + FALSE;
            m DilitationLt1 = FALSE;
            m DilitationUkn = FALSE;
      // update dialog with new data
      UpdateData (FALSE) ;
void CPTDInp::OnDilitation23()
```

```
// get current values from dialog
       UpdateData(TRUE);
       if (m Dilitation2 3) {
              m_Dilitation1_2 = FALSE;
m_Dilitation2 = FALSE;
              /7m Dilitation2 3 = FALSE;
              m DI-litation3 = FALSE:
              m_DilitationGt3 = FALSE;
              m_Dilitation1 = FALSE;
              m_DilitationLt1 = FALSE;
              m DilitationUkn = FALSE;
       // update dialog with new data
       UpdateData(FALSE);
void CPTDInp::OnDilitation3()
       // get current values from dialog
       UpdateData(TRUE);
       if (m Dilitation3) {
             m_Dilitation1 2 = FALSE;
m_Dilitation2 = FALSE;
m_Dilitation2_3 = FALSE;
              //m_Dilitation3 = FALSE;
m_DilitationGt3 = FALSE;
              m Dilitation1 = FALSE:
              m DilitationLt1 = FALSE;
              m DilitationUkn = FALSE;
       // update dialog with new data
      UpdateData(FALSE):
}
void CPTDInp::OnDilitationGt3()
       // get current values from dialog
      UpdateData(TRUE);
      if(m_DilitationGt3) {
    m-Dilitation1_2 = FALSE;
              m Dilitation2 = FALSE;
              m_Dilitation2 3 = FALSE;
             m Dilitation3 = FALSE;
//m DilitationGt3 = FALSE;
              m Dilitation1 = FALSE;
              m DilitationLt1 = FALSE:
              m_DilitationUkn = FALSE;
       // update dialog with new data
      UpdateData(FALSE):
}
```

```
void CPTDInp::OnDilitationLt1()
       // get current values from dialog
       UpdateData (TRUE) ;
       if (m DilitationLt1) {
             m_Dilitation1_2 = FALSE;
m_Dilitation2 = FALSE;
             m_Dilitation2_3 = FALSE;
m_Dilitation3 = FALSE;
             m_DilitationGt3 = FALSE;
             m Dilitation1 = FALSE;
             /7m_DilitationLt1 = FALSE;
             m_DilitationUkn = FALSE;
       // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnDilitationUkn()
       // get current values from dialog
      UpdateData(TRUE);
      if (m DilitationUkn)
             m_Dilitation1_2 = FALSE;
             m_Dilitation2 = FALSE;
             m_Dilitation2_3 = FALSE;
             m Dilitation3 = FALSE;
             m_DilitationGt3 = FALSE;
             m Dilitation1 = FALSE;
             m DilitationLt 1= FALSE;
             /7m_DilitationUkn = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
}
void CPTDInp::OnCervFirm()
      // get current values from dialog
      UpdateData(TRUE);
      if (m_CervFirm) {
             m_CervMod = FALSE;
             m_CervSoft = FALSE;
      // update dialog with new data
      UpdateData (FALSE) :
void CPTDInp::OnCervMod()
      // get current values from dialog
      UpdateData(TRUE);
```

```
if(m_CervMod) {
            m_CervFirm = FALSE;
            m CervSoft = FALSE;
}
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnCervSoft()
      // get current values from dialog
      UpdateData(TRUE);
      if (m CervSoft) {
            m_CervMod = FALSE;
            m CervFirm = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp: : OnVaginalBleeding()
      // get current values from dialog
      UpdateData(TRUE);
      if(m_VaginalBleeding) {
} else {
            if(((CPTDinpApp*)AfxGetApp())->ClearSubfields) {
    m_VaginalBleedingGross = FALSE;
                  m_VaginalBleedingMed = FALSE;
                  m VaginalBleedingTrace = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDinp::OnVbGross()
      // get current values from dialog
      UpdateData(TRUE);
      if (m_VaginalBleedingGross)
            m_VaginalBleeding = TRUE;
m_VaginalBleedingMed = FALSE;
            m VaginalBleedingTrace = FALSE;
      m VaginalBleedingTrace == FALSE ) {
                  m VaginalBleeding = FALSE;
      // update dialog with new data
```

```
UpdateData(FALSE);
void CPTDInp::OnVbMed()
       // get current values from dialog
       UpdateData (TRUE) ;
       if(m_VaginalBleedingMed) {
             m VaginalBleedingGross = FALSE;
             m VaginalBleeding = TRUE;
             m_VaginalBleedingTrace = FALSE;
          else
             if (m_VaginalBleedingGross == FALSE &&
                    m VaginalBleedingTrace ++ FALSE ) {
                    m_VaginalBleeding = FALSE;
       // update dialog with new data
      UpdateData(FALSE):
void CPTDInp::OnVbTrace()
       // get current values from dialog
      UpdateData (TRUE) ;
      if (m_VaginalBleedingTrace) {
             m_VaginalBleedingGross = FALSE;
m_VaginalBleedingMed = FALSE;
m_VaginalBleeding = TRUE;
       } else {
             if(m_VaginalBleedingMed == FALSE
                    m_VaginalBleedingGross == FALSE ) {
                    m_VaginalBleeding = FALSE;
             }
       // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::On2Comp()
       // get current values from dialog
      UpdateData(TRUE);
      if(m_2_COMP) {
       } else
             if(((CPTDinpApp*)AfxGetApp())->ClearSubfields) {
                   m_2_COMP_1 = FALSE;
m_2_COMP_2 = FALSE;
m_2_COMP_3 = FALSE;
      // update dialog with new data
```

```
UpdateData(FALSE);
void CPTDInp::On2Compl()
      // get current values from dialog
     UpdateData(TRUE);
     if(m_2_COMP_1) {
    m_2_COMP = TRUE;
    m_2_COMP_2 = FALSE;
           m_2_COMP_3 = FALSE;
       else
           // update dialog with new data
     UpdateData(FALSE):
}
void CPTDInp::on2Comp2()
      // get current values from dialog
     UpdateData(TRUE);
     // update dialog with new data
     UpdateData (FALSE);
void CPTDInp::on2Comp3()
     // get current values from dialog
     UpdateData (TRUE) :
     if (m_2_COMP_3) {
     m_2_COMP = TRUE;
m_2_COMP 2 = FALSE;
m_2_COMP_1 = FALSE;
} else {
           }
```

```
// update dialog with new data
                            UpdateData (FALSE);
  }
  void CPTDInp::OnPatientCompl()
                             // get current values from dialog
                            UpdateData(TRUE);
                            if(m_PatientCompl) {
                             } else {
                                                        if(((CPTDinpApp*)AfxGetApp())->ClearSubfields) {
                                                                                 CPIDINDAPP* AIXGETAPP()) --

patCompl LT1 = FALSE;

m_PatCompl 1 3 = FALSE;

m_PatCompl 7 - 9 = FALSE;

m_PatCompl 7 - 9 = FALSE;

m_PatCompl 1 - 12 = FALSE;

m_PatCompl 1 - 12 = FALSE;
                             // update dialog with new data
                            UpdateData(FALSE);
 void CPTDInp::OnPc113()
                             // get current values from dialog
                           UpdateData(TRUE);
                           if(m_PatComp1_1_3) {
    m_PatComp1_LT1 = FALSE;
                                                       m_PatientCompl = TRUE;
                                                      m_PatComp1_4_6 = FALSE;
m_PatComp1_7_9 = FALSE;
m_PatComp1_10_12 = FALSE;
                                                       m PatComp1 GT12 = FALSE;
                            } else {
                                                      if (m_PatCompl_LT1 == FALSE &&
m_PatCompl_1_3 == FALSE &&
m_PatCompl_4 == FALSE &&
m_PatCompl_7 == FALSE &&
m_PatCompl_10 == FALSE &&
m_PatCompl_01 == FALSE == FALSE == M_PatCompl_1 == M_PatCompl_1 == FALSE == M_PatCompl_1 == M
                            // update dialog with new data
                           UpdateData(FALSE);
}
void CPTDInp::OnPc11012()
                            // get current values from dialog
                           UpdateData(TRUE);
```

```
if(m_PatComp1_10_12) {
    m_PatComp1_LT1 = FALSE;
    m_PatComp1_1_3 = FALSE;
                      m_PatComp1_4_6 = FALSE;
m_PatComp1_7_9 = FALSE;
                      m_PatientComp1 = TRUE;
           m PatComp1_GT12 = FALSE;
} else {
           if (m PatComp1 LT1 == FALSE &&
                     m_PatComp1_1 == FALSE &&
m_PatComp1_1 == FALSE &&
m_PatComp1_4 == FALSE &&
m_PatComp1_7 == FALSE &&
m_PatComp1_10_12 == FALSE ) {
                      m_PatientComp1 = FALSE;
           // update dialog with new data
           UpdateData (FALSE);
void CPTDInp::OnPc146()
           // get current values from dialog
          UpdateData(TRUE);
           if(m_PatComp1_4_6) {
                     m_PatCompl_LT1 = FALSE;
m_PatCompl_1_3 = FALSE;
          m_raccomp1_i_3 = FALSE;
m_PatientComp1 = TRUE;
m_PatComp1_7 9 = FALSE;
m_PatComp1_10_12 = FALSE;
m_PatComp1_GT12 = FALSE;
} else {
                      if (m_PatComp1_LT1 == FALSE &&
                                PatComp1 1 3 == FALSE &&
m_PatComp1 1 3 == FALSE &&
m_PatComp1 4 6 == FALSE &&
m_PatComp1 7 9 == FALSE &&
m_PatComp1 10 12 == FALSE &&
m_PatComp1_GTI2 == FALSE ) {
                                 m PatientComp1 = FALSE:
           // update dialog with new data
          UpdateData (FALSE);
}
void CPTDInp::OnPc179()
           // get current values from dialog
          UpdateData(TRUE);
          if(m_PatComp1_7_9) {
    m_PatComp1_LT1 = FALSE;
    m_PatComp1_1_3 = FALSE;
    m_PatComp1_4_6 = FALSE;
```

```
m_PatientComp1 = TRUE;
m_PatComp1_10_12 = FALSE;
                   m PatComp1 GT12 = FALSE;
          } else {
                    if (m_PatComp1_LT1 == FALSE &&
                             m_PatComp1_13 == FALSE &&
m_PatComp1_4_6 == FALSE &&
m_PatComp1_7_9 == FALSE &&
m_PatComp1_10 12 == FALSE &&
m_PatComp1_GT12 == FALSE &&
                                                                     FALSE ) {
                             m PatientComp1 = FALSE;
          // update dialog with new data
         UpdateData(FALSE);
void CPTDInp::OnPc1Gt12()
          // get current values from dialog
         UpdateData(TRUE);
         if (m PatComp1 GT12) {
                   m_PatComp1_LT1 = FALSE;
                   PatComp1 1 3 = FALSE;
m_PatComp1 4 6 = FALSE;
m_PatComp1 7 9 = FALSE;
m_PatComp1 10 12 = FALSE;
m_PatientComp1 = TRUE;
          } else
                   if (m_PatComp1_LT1 == FALSE &&
                             m_PatComp1_1_4_6 == FALSE &&
m_PatComp1_7_9 == FALSE &&
                             m_PatCompl_10_12 == FALSE &&
m_PatCompl_GT12 == FALSE ) {
m_PatientComp1 = FALSE;
          // update dialog with new data
         UpdateData(FALSE);
}
void CPTDInp::OnPc1Lt1()
          // get current values from dialog
         UpdateData(TRUE);
         if (m_PatComp1 LT1) {
                   m_PatientComp1 = TRUE;
                   m_PatCompl 1 3 = FALSE;
m_PatCompl 4 6 = FALSE;
m_PatCompl 7 9 = FALSE;
m_PatCompl 10 12 = FALSE;
m_PatCompl 10 12 = FALSE;
m_PatCompl 20 = FALSE;
          } else
                    if (m_PatComp1_LT1 == FALSE &&
```

```
m_PatComp1_1_3 == FALSE &&
m_PatComp1_4_6 == FALSE &&
m_PatComp1_7_9 == FALSE &&
m_PatComp1_10_12 == FALSE &&
m_PatComp1_GT12 == FALSE ) {
                    m PatientComp1 = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnEoAsian()
#ifdef NOT
      // get current values from dialog
      UpdateData(TRUE);
      if (m_EthnicOriginAsian) {
             //m_EthnicOriginAsian = FALSE;
             m EthnicOriginBlack = FALSE;
             m_EthnicOriginHispanic = FALSE;
             m_EthnicOriginNativeAmerican = FALSE;
             m EthnicOriginOther = FALSE;
             m EthnicOriginWhite = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
#endif
void CPTDInp::OnEoBlack()
#ifdef NOT
      // get current values from dialog
      UpdateData(TRUE);
      if (m EthnicOriginBlack) {
             m_EthnicOriginAsian = FALSE;
             /7m EthnicOriginBlack = FALSE;
             m_EthnicOriginHispanic = FALSE;
             m_EthnicOriginNativeAmerican = FALSE;
             m_EthnicOriginOther = FALSE;
             n EthnicOriginWhite = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
#endif
void CPTDInp::OnEoHispanic()
#ifdef NOT
      // get current values from dialog
      UpdateData(TRUE);
      if (m_EthnicOriginHispanic) {
             m_EthnicOriginAsian = FALSE;
```

```
m EthnicOriginBlack = FALSE;
            /7m_EthnicOriginHispanic = FALSE;
            m EthnicOriginNativeAmerican = FALSE;
            m EthnicOriginOther = FALSE;
            m_EthnicOriginWhite = FALSE;
}
      // update dialog with new data
      UpdateData(FALSE);
#endif
void CPTDInp::OnEoNativeAmerican()
#ifdef NOT
      // get current values from dialog
      UpdateData (TRUE) ;
      if(m_EthnicOriginNativeAmerican)
            m EthnicOriginAsian = FALSE;
            m_EthnicOriginBlack = FALSE;
            m EthnicOriginHispanic = FALSE;
            /7m_EthnicOriginNativeAmerican = FALSE;
            m_EEhnicOriginOther = FALSE;
            m_EthnicOriginWhite = FALSE;
      // ate dialog with new data
      UpdateData (FALSE);
#endif
void CPTDInp::OnEoOther()
#ifdef NOT
      // get current values from dialog
      UpdateData(TRUE);
      if (m_EthnicOriginOther) {
            m_EthnicOriginAsian = FALSE;
            m EthnicOriginBlack = FALSE;
            m_EthnicOriginHispanic = FALSE;
            m EthnicOriginNativeAmerican = FALSE;
            /7m EthnicOriginOther = FALSE;
            m EthnicOriginWhite = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
#endif
void CPTDInp::OnEowhite()
#ifdef NOT
      // get current values from dialog
      UpdateData(TRUE);
      if (m_EthnicOriginWhite) {
            m EthnicOriginAsian = FALSE;
            m_EthnicOriginBlack = FALSE;
m EthnicOriginHispanic = FALSE;
            m EthnicOriginNativeAmerican = FALSE;
```

```
m EthnicOriginOther = FALSE;
            //m_EthnicOriginWhite = FALSE;
}
      // update dialog with new data
      UpdateData(FALSE);
#endif
void CPTDInp::OnLMsDivorced()
      // get current values from dialog
      UpdateData(TRUE);
      if (m MaritalStatusDivorced) {
            //m MaritalStatusDivorced = FALSE;
            m MaritalStatusLWP = FALSE;
            m MaritalStatusMarried = FALSE;
            m MaritalStatusOther = FALSE;
            m MaritalStatusSingle = FALSE;
            m MaritalStatusWidowed = FALSE;
      // update dialog with new data
      UpdateData(FALSE):
void CPTDInp::OnMsLwp()
      // get current values from dialog
      UpdateData(TRUE);
      if (m MaritalStatusLWP) {
            m MaritalStatusDivorced = FALSE;
            /7m_MaritalStatusLWP = FALSE;
            m MaritalStatusMarried = FALSE;
            m MaritalStatusOther = FALSE;
            m MaritalStatusSingle = FALSE;
            m_MaritalStatusWidowed = FALSE;
}
      // update dialog with new data
      UpdateData (FALSE) ;
void CPTDInp::OnMsMarried()
      // get current values from dialog
      UpdateData (TRUE) ;
      if (m MaritalStatusMarried) {
            m_MaritalStatusDivorced = FALSE;
            m MaritalStatusLWP = FALSE;
            //m_MaritalStatusMarried = FALSE;
            m_MaritalStatusOther = FALSE;
            m MaritalStatusSingle = FALSE;
            m_MaritalStatusWidowed = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
```

```
void CPTDInp::OnMsOther()
      // get current values from dialog
      UpdateData(TRUE);
      if (m_MaritalStatusOther) {
            m MaritalStatusDivorced = FALSE;
            m MaritalStatusLWP = FALSE;
            m MaritalStatusMarried = FALSE;
            /7m MaritalStatusOther = FALSE;
            m_MaritalStatusSingle = FALSE;
            m MaritalStatusWidowed = FALSE;
      // update dialog with new data
      UpdateData (FALSE);
void CPTDInp::OnMsSingle()
      // get current values from dialog
      UpdateData(TRUE);
      if (m MaritalStatusSingle) {
            m MaritalStatusDivorced = FALSE;
            m MaritalStatusLWP = FALSE;
            m_MaritalStatusMarried = FALSE;
            m MaritalStatusOther = FALSE;
            /7m_MaritalStatusSingle = FALSE;
            m_MaritalStatusWidowed = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnMsWidowed()
      // get current values from dialog
      UpdateData(TRUE);
      if (m MaritalStatusWidowed) {
            m MaritalStatusDivorced = FALSE;
            m_MaritalStatusLWP = FALSE;
            m MaritalStatusMarried = FALSE;
            m MaritalStatusOther = FALSE;
            m MaritalStatusSingle = FALSE;
            /7m MaritalStatusWidowed = FALSE;
      // update dialog with new data
      UpdateData(FALSE);
void CPTDInp::OnOK()
double val:
char str[32];
```

```
char *ps;
int m, d, y;
      UpdateData(TRUE);
      // Check the Date of Birth field
      // parse the data from mm/dd/yyyy
      strcpv(str, m DATE OF BIRTH);
      m = atoi(str);
      if( m < 1 || m > 12) {
            AfxMessageBox("Please enter date in mm/dd/yy format. Month out
of range");
            return;
      ps = strchr(str,'/');
if( ps == NULL ) {
            AfxMessageBox ("Please enter date in mm/dd/yy format.");
      } else {
            ps++;
            d = atoi(ps);
            if(d<1 | d > 31) {
                  AfxMessageBox ("Please enter date in mm/dd/yy format. Day
out of range"):
                  return;
      ps = strchr(ps, '/');
if( ps == NULL ) {
            AfxMessageBox ("Please enter date in mm/dd/yy format.");
            return;
      } else {
            ps++;
            y = atoi(ps);
            if(y < 30) y += 2000;
            if( y < 99 ) y += 1900;
      // Check all boxes that are used by the network if(
            m EthnicOriginAsian == FALSE &&
            m_EthnicOriginBlack == FALSE &&
            m EthnicoriginHispanic == FALSE &&
            m EthnicOriginNativeAmerican == FALSE &&
            m EthnicOriginOther == FALSE &&
            m EthnicOriginWhite == FALSE
      ) {
            AfxMessageBox ("Please make selection for Ethnic Origin");
            return;
      }
      if(
            m MaritalStatusDivorced == FALSE &&
            m MaritalStatusLWP == FALSE &&
            m MaritalStatusMarried == FALSE &&
            m MaritalStatusOther == FALSE &&
            m_MaritalStatusSingle == FALSE &&
            m MaritalStatusWidowed == FALSE
      ) {
```

```
AfxMessageBox ("Please make selection for Marital Status");
             return;
      }
      if(
             m_CervFirm == FALSE &&
             m_CervMod == FALSE &&
m_CervSoft == FALSE
      ) {
             // AfxMessageBox ("Please make selection for Cervical
Consistancy");
             //return;
      if(
             m_Dilitation1_2 == FALSE &&
m_Dilitation2 == FALSE &&
             m_Dilitation2_3 == FALSE &&
m_Dilitation3 == FALSE &&
             m DilitationGt3 == FALSE &&
             m Dilitation1 == FALSE &&
             m DilitationLt1 == FALSE &&
             m_DilitationUkn == FALSE
      ) {
             AfxMessageBox ("Please make selection for Dilatation");
             return;
      }
      if(
             m FFN Neg == FALSE &&
             m FFN Pos == FALSE
      ) {
             AfxMessageBox ("Please make selection for fFN Result");
             return:
      val = (double) atof (m EGAbySONO);
      if( val == 0.0 ) {
             AfxMessageBox ("Please enter value for EGA by SONO");
             return;
      if(val < 24.0 || val > 45.0 ) {
    AfxMessageBox ("Value for EGA by SONO must be between 24.0 and
45.0 weeks");
             return;
      val = (double) atof (m EGAbyLMP);
      if(val == 0.0)
             AfxMessageBox ("Please enter value for EGA by LMP");
             return;
       if( val < 24.0 || val > 45.0 ) {
             AfxMessageBox("Value for EGA by LMP must be between 24.0 and
45.0 weeks");
             return;
      val = (double) atof (m_EGAatSample);
      if( val == 0.0 ) {
             AfxMessageBox ("Please enter value for EGA at Sample");
```

```
return:
        if( val < 24.0 || val > 45.0 ) {
               AfxMessageBox ("Value for EGA at Sample must be between 24.0
and 45.0 weeks");
               return;
       strcpy(str,m GRAVITY);
       if(str[0] == 0 ) {
               AfxMessageBox ("Please enter value for Gravity");
               return:
       }
       strcpy(str,m_PARITY);
       if( str[0] == 0 ) {
               AfxMessageBox ("Please enter value for Parity");
               return:
       strcpy(str,m_ABORTIONS);
       if( str[0] == 0 ) {
               AfxMessageBox ("Please enter value for Abortions");
               return;
       if (m 2 COMP == TRUE &&
               m_2 COMP_1 == FALSE &&
m_2 COMP_2 == FALSE &&
m_2 COMP_3 == FALSE ) {
               AfxMessageBox ("Please make selection under History of Preterm
Delivery");
               return:
        if (m VaginalBleedingMed == FALSE &&
               m_VaginalBleedingGross == FALSE &&
m_VaginalBleeding == TRUE &&
m_VaginalBleedingTrace == FALSE ) {
               AfxMessageBox ("Please make selection under Vaginal Bleeding"):
               return:
        if (m MultipleGestation == TRUE &&
               m MultipleGestationOuads == FALSE &&
               m_MultipleGestationTriplets == FALSE &&
               m MultipleGestationTwins == FALSE ) {
               AfxMessageBox ("Please make selection under Multiple
Gestation");
               return;
        if(m PatientComp1 == TRUE &&
               m_PatComp1-LT1 == FALSE &&
               m_PatCompl-LTI == FALSE &&
m_PatCompl 1 3 == FALSE &&
m_PatCompl 4 6 == FALSE &&
m_PatCompl 7-9 == FALSE &&
m_PatCompl 10 12 == FALSE &&
m_PatCompl_TOT12 == FALSE &&
m_PatCompl_GTI12 == FALSE ) {
Af.MessageBox ("Please select Number/hr under Uterine
contractions");
```

```
return:
       CDialog::OnOK();
// PTDDg11.h : header file
11
// CPTDInp dialog
class CPTDInp : public CDialog
// Construction
public:
       CPTDInp(CWnd* pParent = NULL); // standard constructor
// Dialog Data
//{{AFX DATA (CPTDInp)
enum { IDD = IDD D PTD INP };
CString __DATE OF BIRTH;
__NAME F;
                    m_NAME_L;
m,_NAME_MI;
m_l_COMP;
m_2_COMP;
       Cstring
       CString
       BOOT.
       BOOL
                    m_3_COMP;
m_4_COMP;
m_5_COMP;
m_6_COMP;
       BOOL
       BOOL
       BOOL
       BOOL
                    m_ACOG_N;
       ROOT.
       BOOL
                    m_ACOG_Y;
m_Antibiotics;
       BOOL
       BOOL
                    m AntiHyper;
       BOOL
                    m_CervCerclage;
       BOOL
                    m CervFirm;
       BOOL
                    m CervMod;
       BOOL
                    m CervSoft:
       BOOL
                    m Corticosteroids;
       BOOL
                    m_Dilitation1_2;
       BOOL
                    m Dilitation2;
                    m Dilitation2 3;
       BOOL
       BOOL
                    m Dilitation3;
       BOOL
                    m_DilitationGt3;
       BOOL
                    m Dilitation1;
       BOOL
                    m DilitationLt1;
       BOOL
                    m DilitationUkn;
                    m EGAatSample;
       CString
                    m_EGAbyLMP;
m_EGAbySONO;
       CString
       CString
       BOOL
                    m EthnicOriginAsian;
       BOOL
                     m EthnicOriginBlack;
       BOOL
                    m_EthnicoriginHispanic;
       BOOL
                     m EthnicoriginNativeAmerican;
       BOOL
                    m EthnicOriginOther;
```

1 mile

```
m EthnicOriginWhite;
      BOOL
                   m FFN Neg;
      BOOL
      BOOL
                   m FFN Pos;
      BOOL
                    m GestationalDiabetes;
      BOOL
                   m_HypertensiveDisorders;
      BOOL
                    m Insulin;
                   m LadID;
      CString
                    m MedicationNone;
      BOOL
      BOOL
                    m MedicationUnknown;
      BOOT.
                    m MultipleGestationQuads;
      BOOL
                    m MultipleGestationTriplets;
                    m_MultipleGestationTwins;
      BOOL
      BOCL
                    m MaritalStatusDivorced:
      BOOL
                    m MaritalStatusLWP;
      BOOL
                    m MaritalStatusMarried;
      BOOL
            m MaritalStatusOther;
                   m MaritalStatusSingle;
      BOOT.
      BOOL
                    m MaritalStatusWidowed;
      BOOT
                    m MultipleGestation;
      BOOL
                    m PatientComp1;
      BOOL
                    m PatientComp2;
      BOOL
                    m PatientComp3:
                    m PatientComp4;
      BOOL
      BOOL
                    m PatientComp5;
      BOOL
                    m PatientComp6;
      BOOL
                    m_Tocolytics;
      BOOL
                    m UtCervAbnormal;
      BOOT.
                    m VaginalBleeding;
      BOOL
                    m VaginalBleedingGross;
                    m VaginalBleedingMed;
      BOOL
      BOOL
                    m VaginalBleedingTrace:
                    m 2 COMP 1;
m 2 COMP 2;
m 2 COMP 3;
m ABORTIONS;
      BOOL
      BOOL
      BOOL
      CString
      CString
                    m PARITY;
                    m PatComp1_1_3;
      BOOT.
                   m PatComp1 1 3;
m PatComp1 10 12;
m PatComp1 4 6;
m PatComp1 7 9;
m PatComp1 GT12;
m PatComp1 LT1;
      BOOL
      BOOL
      BOOL
      ROOT
      BOOL
                    m_GRAVITY;
      CString
      //}}AFX DATA
      Implementation
protected:
      virtual void DoDataExchange(CDataExchange* pDX); // DDX/DDV support
       // Generated message map functions
       //{{AFX_MSG(CPTDInp)
      virtual
                           ROOL
                                         OnInitDialog();
      afx msq
                    void
                                  OnRButtonDown (UINT nFlags, CPoint point);
      afx msg
                    void
                                  OnAcogN();
      afx_msg
                    void
                                  OnAcogY();
      afx msq
                    void
                                  OnFfnNeq();
      afx msg
                    void
                                  OnFfnPos();
      afx msq
                    void
                                  OnMqQuads();
      afx_msg
                    void
                                  OnMgTriplets();
      afx msg
                    void
                                  OnMcTwins()
      afx msg
                    void
                                 OnMultGest():
```

```
afx msq
             void
                          OnDilitation1():
             void
afx msg
                          OnDilitation12();
afx msq
             void
                          OnDilitation2();
             void
                          OnDilitation23();
afx msq
afx_msg
             void
                          OnDilitation3();
afx_msg
afx_msg
             void
                          OnDilitationGt3();
             void
                          OnDilitationLt1():
             void
                          OnDilitationUkn();
afx msg
                          OnCervFirm();
afx msg
             void
                          OnCervMod();
afx_msg
afx_msg
             void
             void
                          OnCervSoft();
                          OnVaginalBleeding();
afx msg
             void
afx msq
             void
                          OnVbGross():
             void
                          OnVbMed();
afx_msg
             void
                          OnVbTrace();
afx_msg
afx msq
             void
                          On2Comp();
afx msg
             void
                          On2Comp1();
afx msg
             void
                          On2Comp2();
             void
                          On2Comp3();
afx_msg
afx_msg
afx_msg
             void
                          OnPatientComp1();
             void
                          OnPc113();
afx msq
             void
                          OnPc11012():
             void
afx_msg
                          OnPc146();
afx msg
             void
                          OnPc179();
afx_msg
             void
                          OnPc1Gt12();
             void
                          OnPc1Lt1();
virtual
                    void OnOK();
afx_msg
             void
                          OnEoAsian();
afx_msg
afx_msg
             void
                          OnEoBlack();
             void
                          OnEoHispanic();
afx msq
             void
                          OnEoNativeAmerican():
afx msg
             void
                          OnEoOther();
             void
                          OnEoWhite();
afx_msg
afx msq
             void
                          OnMsDivorced();
afx msg
             void
                          OnMsLwp();
                          OnMsMarried();
afx msg
             void
afx_msg
             void
                          OnMsOther();
afx_msg
afx_msg
//}}AFX_MSG
             void
                          OnMsSingle();
                          OnEoWidowed();
             void
DECLARE_MESSAGE_MAP()
```

```
// ptdgoto.cpp : implementation file

#include "stdafx.h"
#include "ptdinp.h"
#include "ptdgoto.h"
#ifdef DEBUG
#undef THIS_FILE
static char BASED_CODE THIS_FILE[] = FILE;
#endif
```

```
// CPtdGoto dialog
CPtdGoto::CPtdGoto(CWnd* pParerit /*=NULL*/)
     : CDialog(CPtdGoto::IDD, pParent)
     //{{AFX DATA INIT(CPtdGoto)
     m IDStr = "";
     m_GotoMode = -1;
     m RecNum = 0;

/7}}AFX DATA INIT
void CPtdGoto::DoDataExchange(CDataExchange* pDX)
     CDialog::DoDataExchange(pDX);
     CLIAIOG::DOBATABAYCIAGAGE

//{AFX DATA MAP(CFL#Goto)

DDX Text (pDX, IDC E GOTO ID NUM, m_IDStr);

DDX Radio(pDX, IDC E, GOTO SEL1, m_GotoMode);

DDX Text (pDX, IDC E, GOTO REC_NUM, m_RecNum);

DDY MinMaxLong (pDX, m_RecNum, 0, 100000);

//}}AFX_DATA_MAP
BEGIN MESSAGE_MAP(CPtdGoto, CDialog)
     //{{AFX_MSG_MAP(CPtdGoto)
          // NOTE: the ClassWizard will add message map macros here
     //}}AFX MSG MAP
END MESSAGE MAP()
// CPtdGoto message handlers
// ptdgoto.h : header file
// CPtdGoto dialog
class CPtdGoto : public CDialog
// Construction
public:
     CPtdGoto(CWnd* pParent = NULL); // standard constructor
// Dialog Data
    //{ AFX_DATA(CPtdGoto)
    enum { IDD = IDD_D_GOTO );
     CString m IDStr:
     int m GotoMode;
     long m_RecNum;
//}}AFX_DATA
// Implementation
protected:
     virtual void DoDataExchange(CDataExchange* pDX); // DDX/DDV support
```

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```
// Generated message map functions
      //{{AFX MSG(CPtdGoto)
             // NOTE: the ClassWizard will add member functions here
       //}}AFX_MSG
      DECLARE MESSAGE MAP()
// PTDidoc.cpp : implementation of the CPTDinpDoc class
#include "stdafx.h"
#include "PTDinp.h"
#include "PTDidoc.h"
#include "PTDGoto.h"
#include "aa nets.h"
#ifdef _DEBUG
#undef THIS_FILE
static char BASED CODE THIS FILE[] = FILE ;
// CPTDinpDoc
IMPLEMENT DYNCREATE (CPTDinpDoc, CDocument)
BEGIN MESSAGE MAP(CPTDinpDoc, CDocument)
      MESSAGE MAP(CFIDINDOC, COCCAMAIN)
//{{AFX_MSG_MAP(CPTDINDOC)
ON_COMMAND(ID_REC_FIRST, OnRecFirst)
ON_COMMAND(ID_REC_LAST, OnRecLast)
       ON COMMAND(ID_REC_NEXT, OnRecNext)
      ON COMMAND (ID REC PREV, OnRecPrev)
      ON COMMAND(ID_FILE_OPEN, OnFileOpen)
ON COMMAND(ID_BLD_NET_FILE, OnBldNetFile)
       ON COMMAND (ID REC GOTO, OnRecGoto)
      ON COMMAND (ID_FILE_MRU_FILE1, OnFileMruFile1)
ON_COMMAND (ID_FILE MRU_FILE2, OnFileMruFile2)
ON_COMMAND (ID_FILE_MRU_FILE3, OnFileMruFile3)
      ON COMMAND (ID FILE MRU FILE4, OnFileMruFile4)
//}}AFX_MSG_MAP
END_MESSAGE_MAP()
// CPTDinpDoc construction/destruction
CPTDinpDoc::CPTDinpDoc()
       CurRecord = 0;
       NumRecords =
       strcpy(PathName, "");
       IDStr = "";
       GotoMode = 0;
       InitializeRec():
      LoadNets();
```

```
m NetPos1 = 0.0;
    m_NetNeg1 = 0.0;
    m NetPos2 = 0.0;
    m NetNeg2 = 0.0:
    m NetPos3 = 0.0;
    m NetNeg3 = 0.0;
CPTDinpDoc::~CPTDinpDoc()
    (CPTDinpApp*) AfxGetApp())->m_pDoc = NULL;
    FreeNets():
BOOL CPTDinpDoc::OnNewDocument()
    if (!CDocument::OnNewDocument())
         return FALSE:
    ((CPTDinpApp*)AfxGetApp())->m_pDoc = this;
    // TODO: add reinitialization code here
    // (SDI documents will reuse this document)
    return TRUE;
// CPTDinpDoc serialization
void CPTDinpDoc::Serialize(CArchive& ar)
    if (ar.IsStoring())
         // TODO: add storing code here
    élse
         // TODO: add loading code here
// CPTDinpDoc diagnostics
#ifdef DEBUG
void CPTDinpDoc::AssertValid() const
    CDocument:: AssertValido();
void CPTDinpDoc: :Dump (CDumpContext& dc) const
    CDocument::Dump(dc);
#endif // _DEBUG
```

```
// CPTDinpDoc commands
void CPTDinpDoc::OnRecFirst()
      CurRecord = 0;
      get_rec(Rec);
void CPTDinpDoc::OnRecLast()
      CurRecord = NumRecords - 1;
      get rec(Rec);
void CPTDinpDoc::OnRecNext()
      CurRecord = min(CurRecord + 1, NumRecords - 1);
      get rec(Rec);
void CPTDinpDoc::OnRecPrev()
      CurRecord = max(CurRecord - 1, 0);
      get_rec(Rec);
void CPTDinpDoc::get rec( char* pRec )
FILE *fp;
char *stmp:
      fp = fopen(PathName, "rb");
      if(fp==NULL) {
       } else {
             f seek (fp, (long) ((REC_LENGTH + 2L) *CurRecord) , SEEK_SET);
             f read (pRec, sizeof (char), (REC LENGTH + 2L), fp);
             fclose(fp);
      m_LAB_ID = get fld(pRec,1,12);
m_NAME_L = get_fld(pRec,13,24);
m_NAME_F = get_fld(pRec,37,24);
      m NAME MI = get fld(pRec, 61, 2);
      m DATE OF DATA ENTRY = get f ld (pRec, 63, 10) //time
      m_PATIENT_AGE = (double) atof (get_fld (pRec, 73, 20))
m_DATE_OF_BIRTH = get_fld(pRec, 93, 10);
//stmp = get_fld(pRec, 103, 2);
//Stdmp - get_Int(Rec.105,27),

m_ETHNIC_ORIGIN_WHITE = ("1"); else
m_ETHNIC_ORIGIN_WHITE = ("0");

//Af(stmp[0] == '2') m_ETHNIC_ORIGIN_BLACK = ("1"); else
m_ETHNIC_ORIGIN_BLACK = ("0");
```

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```
//if(stmp[0] == '3') m ETHNIC ORIGIN ASIAN = ("1"); else
m ETHNIC ORIGIN ASIAN = ("0") ;
          //if(stmp[0] == '4') m ETHNIC ORIGIN HISPANIC = ("1"); else
m ETHNIC ORIGIN HISPANIC = ("0");
//if(stmp[0] == '5') m_BTHNIC_ORIGIN_NATIVE_AMERICAN = ("1"); else
m_ETHNIC_ORIGIN_NATIVE_AMERICAN = ("0");
//if(stmp[0] == '6') m_ETHNIC_ORIGIN_OTHER = ("1"); else
m_ETHNIC_ORIGIN_OTHER = ("0");
          m ETHNIC ORIGIN WHITE = get fld(pRec, 103, 2);
          m_ETHNIC_ORIGIN_BLACK = get_fld(pRec,105,2);
          m ETHNIC ORIGIN ASIAN = get_fld(pRec,107,2);
m ETHNIC ORIGIN HISPANIC = get_fld(pRec,109,2);
          m ETHNIC ORIGIN NATIVE AMERICAN = get fld(pRec,111,2);
m_EIRNIC_ORIGIN_OTHER = get_fid(pRec,113,2);
stmp = get_fid(pRec,115,2);
if(stmp[0] == '1') m_MARITAL_STATUS_SINGLE = ("1"); else
m_MARITAL_STATUS_SINGLE = ("0");
           if(stmp[0] == '2') m_MARITAL_STATUS_MARRIED = ("1"); else
m_MARITAL_STATUS_MARRIED = ("0");
if(stmp[0] == '3') m MARITAL STATUS_DIVORCED = ("1"); else
m MARITAL STATUS DIVORCED = ("0");
           if(stmp[0] == '4') m_MARITAL_STATUS_WIDOWED = ("1"); else
m_MARITAL_STATUS_WIDOWED = ("0");
           if(stmp[0] == '5') m_MARITAL_STATUS_LWP = ("1"); else
m_MARITAL_STATUS_LWP = ("0");
if(stmp[0] == '6') m_MARITAL_STATUS_OTHER = ("1"); else
m MARITAL STATUS OTHER = ("0");
          m ACOG SYNPTOMS = get fld(pRec, 117, 2);
          stnp = get fld(pRec,119,2);
if (stmp [0] == '0') m VAGINAL BLEEDING = ("0"); else
m_VAGINAL_BLEEDING = ("1");
m_VAGINAL_BLEEDING = ("1"); else

"I (stmp[0] == '1') m_VAGINAL_BLEEDING_TRACE = ("1"); else

m_VAGINAL_BLEEDING_TRACE = ("0")

if (stmp[0] == '2') m_VAGINAL_BLEEDING_MEDIUM = ("1"); else

m_VAGINAL_BLEEDING_MEDIUM = ("0");

if (stmp[0] == '3') m_VAGINAL_BLEEDING_GROSS = ("1"); else
m_VAGINAL_BLEEDING_GROSS = ("0")
          IN JEEDING GROSS - ("O")

If (stmp [0] == 0) m VAGINAL BLEEDING = ("O")

M PATIENT COMPLAINT 1 = get fid(pRec,121,2);

M PATIENT COMPLAINT 2 = get_fid(pRec,123,2);

M PATIENT COMPLAINT 3 = get_fid(pRec,125,2);
          m PATIENT COMPLAINT 4 = get fld(pRec,127,2);
m PATIENT COMPLAINT 5 = get fld(pRec,129,2);
m PATIENT COMPLAINT 6 = get fld(pRec,131,2);
           stmp get fld(pRec, 133, 2);
stmp_get_Intljact_137,2/\dots
fstmp[0] == '1') m PATIENT_COMPLAINT_1_LT1 = ("1");else
m_PATIENT_COMPLAINT_1 LT 1 = ("0");
if(stmp[0] == '2') m_PATIENT_COMPLAINT_1_1_3 ("1"); else
m_PATIENT_COMPLAINT_1 1_3 = ("0");
    if(stmp[0] == '3') m_PATIENT_COMPLAINT_1_4_6 = ("1"); else
m_PATIENT_COMPLAINT_1_4_6 = ("0");
    if(stmp[0] == '4') m_PATIENT_COMPLAINT_1_7_9 = ("1"); else
m_PATIENT_COMPLAINT_1 7 9 ("0");
if(stmp(0] == '5') m_PATIENT_COMPLAINT_1 10 12 = ("1"); else
m_PATIENT_COMPLAINT_1_10_12 = ("0");
    if(stmp[0] == '6') m_PATIENT_COMPLAINT_1_GT12 ("1"); else
m PATIENT COMPLAINT 1 G T12 = ("0");

m EGA BY SONO = get fld(pRec,135,8);

m EGA BY LMP = get fld(pRec,134,8);

m EGA AT SAMPLING = get fld (pRec, 151, 8)
           m GRAVITY = get fld(pRec, 159, 2);
```

```
m PARITY = get fld(pRec, 161, 2);
       m_ABORTIONS = get_fld(pRec, 163, 2);
       stmp = get fld(pRec, 165, 2);
       m_1_COMP = get_fld(pRec,169,2);
       m_2_COMP = get_fld(pRec,171,2);
       m_3_COMP = get_fld(pRec,173,2);
m_4_COMP = get_fld(pRec,175,2);
       m_5_COMP = get_fld(pRec,177,2);
m_6_COMP = get_fld(pRec,179,2);
stmp = get fld(pRec,181,2);
stmp = get fld(pRec,181,2);
if (stmp[o] == [o], MULTIPLE_GESTATION ("O"); else
m_MULTIPLE_GESTATION = ("I");
       if(stmp[0] == '1')("1"); m_MULTIPLE_GESTATION_TWINS - ("1"); else
m_MULTIPLE_GESTATION_TWINS = ("0");
if(stmp[0] == '2') m_MULTIPLE_GESTATION_TRIPLETS = ("1"); else
m_MULTIPLE_GESTATION_TRIPLETS = ("0"),
    if(stmp[0] == '3') m_MULTIPLE_GESTATION_QUADS = ("1"); else
m MULTIPLE GESTATION QUADS = ("0");
       if(stmp[0] == 0) m MULTIPLE_GESTATION = ("0");
       m_UTCERV_ABNORMALITY = get_fld(pRec,183,2);
m_CERVICAL_CERCLAGE = get-fld(pRec,185,2);
       m_GESTATIONAL DIABETES = get_fld(pRec,187,2);
m_HYPERTENSIVE_DISORDERS = get_fld(pRec,189,2);
       stmp = get fld(pRec,191,2);
if(stmp[0] == '0') m_DILITATION_UNKNOWN = ("1"); else
m_DILITATION_UNKNOWN = ("0")
       if (stmp[0] == '1) m DILITATION LT1 = ("1"); else m DILITATION LT1 =
("0");
       if(stmp[0] == '2') m_DILITATION_1 = ("1"); else m_DILITATION_1 =
("0");
       if(stmp[0] == '3') m DILITATION 1 2 = ("1"); else m DILITATION 1 2 =
       if(stmp[0] == '4') m DILITATION 2 = ("1"); else m DILITATION 2 =
       if(stmp[0] == '5') m DILITATION 2 3 = ("1"); else m DILITATION 2 3 =
       if(stmp[0] == '6') m_DILITATION_3 = ("1"); else m_DILITATION_3 =
("0"); if(stmp([0] == '7') m_DILITATION_GT3 = ("1"); else m_DILITATION_GT3 =
       stmp = get fld(pRec, 193, 2);
if (stmp [\overline{0}] == '1') m CERVICAL CONSISTANCY_FIRM = ("1") ; else m_CERVICAL_CONSISTANCY_FIRM = ("0");
       if (stmp[0] == '2') m CERVICAL CONSISTANCY MOD = ("1"); else
m CERVICAL CONSISTANCY MOD = ("0");
if (stmp[0] == '3') m CERVICAL CONSISTANCY SOFT = ("1") else
m CERVICAL CONSISTANCY SOFT = ("0");
       m_ANTIBIOTICS = get_fld(pRec,195,2);
       m CORTICOSTEROIDS = get fld(pRec, 197, 2);
       m_TOYOLYTICS = get_fld(pRec,199,2);
       m_INSULIN = get_fld(pRec, 201, 2);
       m_ANTIHYPERTENSIVES = get_fld(pRec,203,2);
m_MEDICATIONS_NONE = get_fld(pRec,205,2);
       m MEDICATIONS UNKNOWN = -get fld(pRec, 207, 2);
       m_FFN_RESULT = get_fld(pRec, 209, 2);
       m_NetPos1 = (double)atof(get_fld(pRec, 211, 20));
m_NetNeg1 = (double)atof(get_fld(pRec, 231, 20));
```

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```
m_NetPos2 = (double)atof(get_fld(pRec, 251, 20));
m_NetNeg2 = (double)atof(get_fld(pRec, 271, 20));
m_NetPos3 = (double)atof(get_fld(pRec, 291, 20));
       m NetNeq3 = (double)atof(get-fld(pRec, 311, 20));
       UpdateAllViews (NULL);
char* CPTDinpDoc: :get_fld (char* pRec, int ofs, int len)
int i;
       for (i = 0; i < len; i++)
               fld[i] = pRec[ofs-1+i];
       fld[len] = 0;
       for( i = len-1; i >= 0; i--) {
    if(fld[i] == ' ') {
                      fld[i] = 0;
               } else {
                      break;
       return fld;
CTime& CPTDinpDoc::qet time fld(char* pRec, int iofs, int len)
int i;
int m,d,y;
int ofs;
       for( i = 0; i < len; i++) {
               fld[i] = pRec(iofs-1+i];
       for( i = len-1; i > 0; i--) {
               if(fld[i] ==
                      fld[i] = 0;
               } else {
                      break;
       strcpy(tstr,fld);
       m = d = y = 0;
ofs = 0;
       while(tstr[ofs] == ' ') ofs++; // skip spaces;
       m = atoi(&tstr[ofs]);
       while(tstr[ofs] >- '0' && tstr[ofs] <= '9') ofs++; // skip number while(tstr[ofs] == '/' || tstr[ofs] == '-') ofs++; // skip delimiter
       d = atoi(&tstr[ofs]);
       if (d == 0) d = 1;
       while(tstr[ofs] >= '0' && tstr[ofs] <= '9') ofs++; // skip number
       while(tstr[ofs] == '/' || tstr[ofs] == '-') ofs++; // skip delimiter
       y = atoi(&tstr[ofs]);
if(y<100) y += 1900;</pre>
       CTime t(y,m,d,0,0,0);
       tim = t:
       return(tim);
```

```
}
void CPTDinpDoc::put rec(char* pRec)
FILE *fp;
CString stmp;
           put fld(pRec, m LAB ID ,1,12);
           put_fld(pRec, m_NAME_L ,13,24);
put_fld(pRec, m_NAME_F ,37,24);
           put_fld(pRec, m_NAME_MI ,61,2);
           put_fld(pRec, m_DATE_OF_DATA_ENTRY ,63,10);
                                                                                                             //time
           put_dbl fld(pRec, m_PATTENT_AGE ,73,20);
put_fld(pRec, m_DATE_OF_BIRTH ,93,10);
           //Stmp = " ";
           //if( m_ETHNIC_ORIGIN_WHITE == "1" ) stmp = "1";
//if( m_ETHNIC_ORIGIN_BLACK == "1" ) stmp = "2";
//if( m_ETHNIC_ORIGIN_ASIAN == "1" ) stmp = "3";
           //if( m_ETHNIC_ORIGIN_ASIAN == "1" ) stmp = "4";
//if( m_ETHNIC_ORIGIN_NATIVE_AMERICAN == ) stmp = "5",
           //if( m_ETHNIC_ORIGIN_OTHER == "1" ) stmp = "6";
          //put fld(pRec, stmp,103,2);
put fld(pRec, m_ETHNIC_ORIGIN_WHITE ,103,2);
put_fld(pRec, m_ETHNIC_ORIGIN_BLACK ,105,2);
          put_fid(pRec, m_ETHNIC_ORIGIN_ASIAN ,107,2);
put_fid(pRec, m_ETHNIC_ORIGIN_HISPANIC ,109,2)
put_fid(pRec, m_ETHNIC_ORIGIN_NATIVE_AMERICAN ,111, 2)
put_fid(pRec, m_ETHNIC_ORIGIN_OTHER ,113,2);
           stmp = " ";
           if ( m MARITAL STATUS SINGLE == "1" ) stmp + "1";
           if( m_MARITAL STATUS MARRIED == "1") stmp "2";
if( m_MARITAL STATUS_DIVORCED == "1") stmp = "3";
           if ( m MARITAL STATUS WIDDWED == "1" ) stmp "4";
if ( m MARITAL STATUS LWP == "1" ) stmp = "5";
if ( m MARITAL STATUS OTHER == "1" ) stmp = "6";
           put fld(pRec, stmp, 115, 2);
           put fld(pRec, m ACOG SYNPTOMS ,117,2);
           stmp = " ";
           if ( m VAGINAL BLEEDING == "O" ) stmp = "0";
           if ( m_VAGINAL BLEEDING TRACE == "1" ) stmp = "1";
if ( m_VAGINAL BLEEDING MEDIUM == "1" ) stmp = "2";
if ( m_VAGINAL BLEEDING GROSS == "1" ) stmp = "3";
           put fld(pRec, stmp, 119, 2);
           put fld(pRec, m PATIENT COMPLAINT 1 ,121,2);
           put_fld(pRec, m_PATIENT_COMPLAINT_2 ,123,2);
           put_fld(pRec, m_PATIENT_COMPLAINT_3 ,125,2);
           put_fld(pRec, m_PATIENT_COMPLAINT_4,127,2);
put_fld(pRec, m_PATIENT_COMPLAINT_5,129,2);
put_fld(pRec, m_PATIENT_COMPLAINT_6,131,2);
           stmp = " ";
           If ( m PATIENT COMPLAINT 1 LT1 == "1" ) stmp = "1"; if ( m PATIENT COMPLAINT 1 1 3 == "1" ) stmp = "2"; if ( m PATIENT COMPLAINT 1 4 6 == "1" ) stmp = "3";
```

```
if( m_PATIENT_COMPLAINT_1_7_9 == "1" ) stmp = "4";
if( m_PATIENT_COMPLAINT_1_10_12 == "1" ) stmp = "5";
if( m_PATIENT_COMPLAINT_1_GT12 == "1" ) stmp = "6";
put_fld(pRec, stmp, 133, 2);
put_fld(pRec, m_EGA_BY_SONO ,135,8);
put_fld(pRec, m_EGA_BY_LMP ,143,8);
put_fld(pRec, m_EGA_AT_SAMPLING ,151,8);
put fld(pRec, m_GRAVITY ,159,2);
put_fld(pRec, m_PARITY, 161,2);
put_fld(pRec, m_ABORTIONS, 163,2);
stmp = " ";
if( m_2_COMP_1 == "1" ) stmp = "1";
if( m_1_COMP_2 == "1") stmp = "2";
if( m_2_COMP_3 == "1") stmp = "3";
put_fld(pRec, stmp,165,2);
put_fld(pRec, m_0_COMP ,167,2);
put_fld(pRec, m 0_COMP, 167,2);
put_fld(pRec, m 1_COMP, 169,2);
put_fld(pRec, m 2_COMP, 171,2);
put_fld(pRec, m 3_COMP, 173,2);
put_fld(pRec, m 4_COMP, 175,2);
put_fld(pRec, m 4_COMP, 177,2);
put_fld(pRec, m 6_COMP, 177,2);
put_fld(pRec, m 6_COMP, 177,2);
stmp = " ":
if ( m MULTIPLE GESTATION == "0" ) stmp = "0";
if( m_MULTIPLE GESTATION TWINS == "1" ) stmp = "1";
if( m_MULTIPLE GESTATION TRIPLETS == "1" ) stmp = "2";
if( m_MULTIPLE GESTATION QUADS == "1" ) stmp = "3";
put fld(pRec, stmp, 181, 2);
put_fld(pRec, m_UTCERV_ABNORMALITY ,183,2);
put_fld(pRec, m_CERVICAL CERCLAGE ,185,2);
put_fld(pRec, m_GESTATIONAL_DIABETES ,187,2);
put fld(pRec, m HYPERTENSIVE DISORDERS ,189,2);
stmp = " ";
if ( m_DILITATION_UNKNOWN == "1" ) stmp = "0";
if ( m_DILITATION_LT1 == "1" ) stmp = "1";
if( m_DILITATION_I == "1") stmp = "2";
if( m_DILITATION_I == "1") stmp"3";
if( m_DILITATION_Z == "1") stmp = "4";
if (m DILITATION 2 3 == "1" ) stmp = "5";
if (m DILITATION 3 == "1" ) stmp = "6";
if (m DILITATION GT3 == "1" ) stmp = "7";
put-fld(pRec, stmp,191,2);
stnp = " ";
if( m_CERVICAL_CONSISTANCY_FIRM == "1") stmp = "1"; if( m_CERVICAL_CONSISTANCY_MOD == "1") stmp = "2"; if( m_CERVICAL_CONSISTANCY_SOFT == "1") stmp = "3";
put fld(pRec, stmp, 193, 2);
put_fld(pRec, m_ANTIBIOTICS ,195,2);
put_fld(pRec, m_CORTICOSTEROIDS ,197,2);
put_fld(pRec, m_TOYOLYTICS ,199,2);
put fld(pRec, m INSULIN ,201,2);
put_fld(pRec, m_ANTIHYPERTENSIVES ,203,2);
put_fld(pRec, m_MEDICATIONS_NONE ,205,2);
```

```
put fld(pRec, m_MEDICATIONS_UNKNOWN ,207,2);
put fld(pRec, m_FFN_RESULT ,209,2);
put_net_fld(pRec, m_NetPos1,211, 20);
       put net fld(pRec, m NetNeg1,231, 20);
       put_net_fld(pRec, m_NetPos2,251, 20);
       put_net_fld(pRec, m_NetNeg2,271, 20);
put_net_fld(pRec, m_NetPos3,291, 20);
put_net_fld(pRec, m_NetNeg3,311, 20);
       fp = fopen(PathName,"r+b");
if(fp==NULL) {
               fp = fopen(PathName, "wb");
               if(fp!=NULL) {
                       fwrite(Rec, sizeof (char), (REC_LENGTH+2L), fp);
                       fflush(fp);
                       fclose(fp):
       } else {
    f seek (fp, (long) ((REC_LENGTH+2L)*Currecord), SEEK_SET);
    f seek (fp, (long) ((REC_LENGTH+2L)*Currecord), SEEK_SET);

               fwrite (pRec, sizeof (char), (REC_LENGTH+2L), fp);
               fflush(fp);
               fclose(fp);
       UpdateAllViews(NULL):
void CPTDinpDoc::put fld(char* pRec, CString& dat, int ofs, int len)
int i;
int fill;
       strcpy(fld,dat);
       fill = 0;
       for( i = 0; i < 1en; i++)
               if (fld[i] == 0) fill = 1;
               if(fill==0) {
                      pRec(ofs-l+i] = fld[i];
               } else {
                       pRec[ofs-l+i] = (char)' ';
       }
}
void CPTDinpDoc::put dbl fld (char* pRec, double dat, int ofs, int len)
int i;
       sprintf(fld, "%20.41f", dat);
       for( i = 0; i < 1en; i++)
               pRec[ofs-1+i] = fld[i];
void CPTDinpDoc::put_net_fld (char* pRec, double dat, int ofs, int len)
int i;
```

```
sprintf(fld, "%20.161f", dat);
      for( i = 0; i < len; i++)
             pRec[ofs-l+i] = fld[i];
}
void CPTDinpDoc: :put-time-fld (char* pRec, CTime& dat, int ofs, int len)
int i;
char *pfld;
      pfld = time2str(dat);
                         ");
      strcat (pfld, "
      for( i = 0; i < 1en; i++)
             pRec[ofs-1+i] = pfld[i];
}
void CPTDinpDoc::OnBldNetFile()
FILE *fp;
      // Get the File Name
      CFileDialog Dlg (FALSE, "ndb", NULL, OFN OVERWRITEPROMPT ,
             "NDB iles (*.nbd) | | *.ndb | | ");
      Dlg.m ofn.1pstrTitle = "Open fixed length Network DataBase file";
      if ( Dlg.DoModal() == IDOK ) {
             strcpy(NetName,Dlg.GetPathName());
             // open the new file
             fp = fopen(NetName, "wb");
             if (fp == NULL) {
                    AfxMessageBox ("Could not open the neural network output
file!");
             } else {
                    // build the record
                    CurRecord = 0:
                    HCURSOR hcurSave;
                    hcurSave = SetCursor (LoadCursor (NULL, IDC WAIT));
                    while ( CurRecord < NumRecords ) {
                           // read the PTD record
                           get_rec(Rec);
                           // run the networks
                           RunNets (CurRecord) ;
                           // build the output record
                           put fld(NetRec, m LAB ID, 1, 12);
                           put_net_fld(NetRec, m_NetPos1, 13, 20);
                           put_net_fld(NetRec, m_NetNeg1, 33, 20);
                          put_net_fld(NetRec, m_NetPos2, 53, 20);
put_net_fld(NetRec, m_NetNeg2, 73, 20);
put_net_fld(NetRec, m_NetPos3, 93, 20);
```

```
put_net_fld(NetRec, m_NetNeg3, 113, 20);
                                            NetRec[132] = (char)0x0d;
                                            NetRec[133] = (char) 0x0a;
                                             // write the output record
                                             fwrite (NetRec, sizeof (char) 134, fp)
                                             // increment to the next PTD record
                                             CurRecord += 1;
                                 close the new file
                                 fclose(fp):
                                 SetCursor(hcurSave);
                      }
           }
void CPTDinpDoc::InitializeRec()
           // add one-time construction code here
           for(int i = 0; i < REC LENGTH; i++) Rec[i] = (char)' ';
           Rec[REC_LENGTH] = (char) 0x0d;
           Rec[REC LENGTH + 1L] = (char) 0x0a;
           //CTime Dtime(1900,1,1,0,0,0);
           char* Dtime = "mm/dd/yy";
           m_LAB_ID = ("");
           m_NAME_L = ("");
m_NAME_F = ("");
           m NAME MI = ("");
           m DATE OF DATA ENTRY = time2str(CTime::GetCurrentTime());
          m_PATIENT_AGE = 0.0;
m_DATE_OF_BIRTH = Dtime;
m_ETHNIC_ORIGIN_WHITE = ("");
           m ETHNIC ORIGIN BLACK = ("");
          "" ETHNIC ORIGIN BLACK = ("");

"ETHNIC ORIGIN MSIAN = ("");

"ETHNIC ORIGIN HISPANIC = ("");

"ETHNIC ORIGIN_NATIVE AMERICAN = ("");

"ETHNIC_ORIGIN_OTHER = ("");
           m_MARITAL_STATUS_SINGLE = ("");
          m_MARITAL_STATUS_MARRIED = ("");
m_MARITAL_STATUS_DIVORCED = ("");
m_MARITAL_STATUS_WIDOWED = ("");
          m MARITAL STATUS WIDOWED = ("");
m MARITAL STATUS LWP = ("");
m MARITAL STATUS COTHER = ("");
m ACCO SYNTOWS = ("");
m PATIENT COMPLAINT 1 = (4 = ("");
m PATIENT COMPLAINT 1 = (4 = ("");
m PATIENT COMPLAINT 1 = (7 = ("");
m PATIENT COMPLAINT 1 = (7 = ("");
m PATIENT COMPLAINT 1 = ("");
m PATIENT COMPLAINT 1 = ("");
m VAGINAL BLEEDING = ("");
m VAGINAL BLEEDING TRACE = ("");
           m VAGINAL BLEEDING TRACE = ("");
m VAGINAL BLEEDING MEDIUM = ("");
```

```
m VAGINAL BLEEDING GROSS = ("");
         m_VAGINAL_BLEEDING_GROSS = ("")
    PATIENT_COMPLAINT_6 = ("");
    M_PATIENT_COMPLAINT_3 = ("");
    M_PATIENT_COMPLAINT_5 = ("");
    M_PATIENT_COMPLAINT_5 = ("");
    M_PATIENT_COMPLAINT_5 = ("");
    M_PATIENT_COMPLAINT_5 = ("");
    M_BGA_BY_SONO = "ww.d";
    M_BGA_BY_LMP = "ww.d";
          m EGA AT SAMPLING = "ww.d";
          m_0_COMP = ("");
          m_1_COMP = ("");
m_2_COMP = ("");
          m_3_COMP = ("");
m_4_COMP = ("");
          m * COMP = ("");

m 5 COMP = ("");

m 6 COMP = ("");

m 2 COMP 1 = ("");

m 2 COMP 2 = ("");

m 2 COMP 3 = ("");
          m GRAVITY = ("");
          m PARITY = ("");
          m ABORTIONS = ("");
          m MULTIPLE GESTATION = ("");
          m_MULTIPLE GESTATION TWINS = ("");
m_MULTIPLE GESTATION TRIPLETS = ("");
m_MULTIPLE GESTATION_QUADS = ("");
m_UTCERY_AEMORMALITY = ("");
          m CERVICAL CERCLAGE = ("");
          m GESTATIONAL DIABETES = ("");
          m GESTATIONAL DIABETS = ("");
mtyperensive discrete = ("");
m_DILITATION_LT = ("");
m_DILITATION_LT = ("");
m_DILITATION_L = ("");
          m_DILITATION_GT3 = ("");
          m_DILITATION_UNKNOWN = ("");
m_CERVICAL_CONSISTANCY_FIRM = ("");
          m_CERVICAL_CONSISTANCY_MOD = ("");
          m CERVICAL CONSISTANCY SOFT = ("");
          m_ANTIBIOTICS = ("");
m_CORTICOSTEROIDS = ("");
          m TOYOLYTICS = ("");
          m INSULIN = ("");
          m_ANTIHYPERTENSIVES = ("");
          m_MEDICATIONS_NONE = ("");
          m MEDICATIONS UNKNOWN = ("");
          m FFN RESULT = ("");
void CPTDinpDoc::LoadNets()
           // load eight networks for each consensus 1-8
           if(LoadNet(1, "ega6 0") != 1) {
                     AfxMessageBox("Could not load ega6 0");
           if(LoadNet(2, "ega6 1") != 2) {
                     AfxMessageBox("Could not load ega6 1");
```

```
if(LoadNet(3, "ega6 2") != 3) {
      AfxMessageBox("Could not load ega6 2");
if(LoadNet(4, "ega6_3") != 4) {
      AfxMessageBox("Could not load ega6 3");
if(LoadNet(5, "ega6_4") != 5) {
    AfxMessageBox("Could not load ega6_4");
if(LoadNet(6, "ega6 5") != 6) {
      AfxMessageBox("Could not load ega6 5");
if (LoadNet (7, "ega6 6") != 7) {
      AfxMessageBox("Could not load ega6 6");
if(LoadNet(8, "ega6_7") != 8) {
      AfxMessageBox("Could not load ega6 7");
// load eight networks for each consensus 9-16
if(LoadNet(9,"egad7f0") != 9) {
     AfxMessageBox("Could not load egad7f0");
if(LoadNet(10, "egad7f1") != 10) {
      AfxMessageBox("Could not load egad7f1");
if (LoadNet (11, "egad7f2") != 11) {
      AfxMessageBox("Could not load egad7f2");
if (LoadNet (12, "egad7f3") != 12) {
      AfxMessageBox("Could not load egad7f3");
if(LoadNet(13,"egad7f4") !- 13) {
      AfxMessageBox("Could not load egad7f4");
if(LoadNet(14,"egad7f5") != 14) {
     AfxMessageBox("Could not load egad7f5");
if(LoadNet(15, "egad7f6") != 15) {
      AfxMessageBox("Could not load egad7f6");
if(LoadNet(16, "egad7f7") != 16) {
      AfxMessageBox("Could not load egad7f7");
// load eight networks for each consensus 17-24
if(LoadNet(17, "egad14f0") != 17) {
      AfxMessageBox("Could not load egad14f");
if(LoadNet(18, "eqad14f1") ! =18) {
      AfxMessageBox("Could not load egad14f1");
if(LoadNet(19, "egad14f2") != 19) {
      AfxMessageBox("Could not load egad14f2");
if(LoadNet(20, "egad14f3") != 20) {
      AfxMessageBox("Could not load egad14f3");
```

```
if (LoadNet (21, "egad14f4") != 21) {
             AfxMessageBox("Could not load egad14f4");
      if (LoadNet (22, "egad14f5") != 22) {
             AfxMessageBox("Could not load egad14f5");
      if(LoadNet(23, "egad14f6") != 23) {
             AfxMessageBox("Could not load egad14f6");
      if (LoadNet (24, "eqad14f7") |= 24) {
             AfxMessageBox("Could not load egad14f7");
void CPTDinpDoc::FreeNets()
      for(int i = 1; i <= 24; i++) FreeNet(i);
void CPTDinpDoc::RunNets(long n)
double Val, Vall, frac;
      Run first ega6 nets
      m NetPos1 = 0.0;
      m NetNeg1 = 0.0;
      for(inti = 1; i <=8; i++) {
             // build inputs from record
             Val = ((m ETHNIC ORIGIN WHITE == "1")?1.0:0.0);
             PutInput(I.1.&Val):
             Val = ((m_MARITAL STATUS_LWP == "1")?1.0:0.0);
             PutInput(1,2,&Val);
             Val = (double) atof (m EGA BY SONO);
             frac = Val - floor(Val);
             Val = floor(Val) + (frac / 0.7);
             PutInput(i,3,&Val);
             //Val = (double) atof (m EGA BY BEST);
             Val = (double)atof(m EGA BY LMP);
             frac = Val - floor(Val);
             Val = floor(Val) + (frac / 0.7);
             Vall = (double) atof (m_EGA_BY_SONO);
             frac = Vall - floor(Vall);
             Vall = floor.(Vall) + (frac / 0.7);
             if(Vall <= 13.0) {
                    Val = Vall;
             } else
                    if(fabs(Val - Vall) > 2.0) {
                       else
                          Val = Vall;
             PutInput(i,4,&Val);
             Val = (double) atof (m_EGA_AT_SAMPLING);
             frac = Val - floor(val);
             Val = floor(Val) + (frac / 0.7);
             PutInput(i,5,&Val);
Val = 0.0; // CD INTERP
             if( m_DILITATION_1 == "1" ) Val = 0.0;
if( m_DILITATION_1 == "1" ) Val = 1.0;
if( m_DILITATION_1_2 == "1" ) Val = 1.5;
```

```
if ( m DILITATION 2 == "1" ) Val = 2.0;
        if( m_DILITATION 2 3 == "1" ) Val = 2.0;
if( m_DILITATION_3 == "1" ) Val = 3.0;
        if ( m_DILITATION_GT3 == "1" ) Val = 3.0;
        PutInput(i,6,&Val);
        Val = 0.0; // Parity-PreTerm
if( m 2 COMP 1 == "1" ) Val = 1.0;
         if( m_2_COMP_2 == "1" ) Val = 2.0;
         if(m_2_COMP_3 == "1" ) Val = 3.0;
        PutInput(i,7,&Val);
        Val = ((m_VAGINAL_BLEEDING == "1")?1.0:0.0);
PutInput(1,8,&Val);
        Val = 1.823197; // CERVICAL CONSISTANCY
        val = 1.63317; // CBRTONL COMSISTANCY | FIRM == "1" ) Val = 1. 0; if (m_CERVICAL_CONSISTANCY MOD == "1" ) Val = 2.0; if (m_CERVICAL_CONSISTANCY_SOFT == "1" ) Val = 3.0; PutInput(i,9,6Val);
        Val = ((m 1_COMP == "1")?1.0:0.0);
PutInput(1,-10,&Val);
        Val = ((m_FFN_RESULT == "1")?1.0:0.0);
PutInput(1,11-,&Val);
         // iterate network
         IterateNet(i);
        // build consensus result
        m_NetPosl += GetState(i,3,1) / 8.0;
        m NetNegl += GetState(i,3,2) / 8.0;
m NetVall = 25. 0 * (m NetPosl - m NetNeg1)
// Run first egad7f nets
m NetPos2 = 0.0;
m_NetNeg2 = 0.0;
for (i = 9; <=16; i++)
         // build inputs from record
         Val = ((m ETHNIC ORIGIN_WHITE == "1")?1-0:0.0);
PutInput(1,1,&Val);
         Val = ((m PATIENT COMPLAINT 1 == "1")?1.0:0.0);
         PutInput(1,2,&Val);
         Val = (double) atof (m ABORTIONS);
         PutInput(i,3,&Val);
         Val = ((m VAGINAL BLEEDING == "1")?1.0:0.0);
        Val = 0.0; //UC_INTERP
if( m_PATIENT_CORPLAINT_1_LT1 == "1" ) Val = 1.0;
        if (m_PATIENT_COMPLAINT 1_DT1 == "1" ) Val = 1.0;
if (m_PATIENT_COMPLAINT 1_1 3 == "1" ) Val = 2.0;
if (m_PATIENT_COMPLAINT 1_7 9 == "1" ) Val = 3.0;
if (m_PATIENT_COMPLAINT 1_7 9 == "1" ) Val = 4.0;
if (m_PATIENT_COMPLAINT 1_012 == "1" ) Val = 5.0;
if (m_PATIENT_COMPLAINT 1_0T12 == "1" ) Val = 6.0;
         PutInput(i,5, &Val);
         Val = ((m_0_COMP == "1")?1.0:0.0);
         PutInput (1,6,&Val);
Val = ((m FFN RESULT == "1")?1.0:0.0);
         PutInput(1,7, &Val);
         // iterate network
         IterateNet(i):
```

```
// build consensus result
                  m_NetPos2 += GetState(i,3,1) / 8.0;
                  m NetNeg2 += GetState(i,3,2) / 8.0;
         m NetVal12 = 25.0 * (m_NetPos2-m_NetNeg2);
         // Run first egad14f nets
         m_NetPos3 = 0.0;
         m NetNeq3 = 0.0;
         for(i = 17; i <=24; i++) {
                  // build inputs from record
                  Val = ((m ETHNIC ORIGIN NATIVE-AMERICAN
                  PutInput(I,1,&Val);
                  Val = ((m_MARITAL_STATUS_LWP == "1")?1.0:0.0);
                  PutInput(\(\overline{1}\), 2, &Val);
Val = ((m PATIENT_COMPLAINT_1 == "1")?1.0:0.0);
                  PutInput(1,3,&Val);
                  Val = 0.0; //CD_INTERP

if (m_DILITATION_LTI == "l" ) Val = 0.0;

if (m_DILITATION] == "l" ) Val = 1.0;

if (m_DILITATION] 2 == "l" ) Val = 1.5;

if (m_DILITATION] 2 == "l" ) Val = 2.0;
                  if( m_DILITATION_2 3 == "1" ) Val = 2.0;
if( m_DILITATION_3 == "1" ) Val = 3.0;
if( m_DILITATION_GT3 == "1" ) Val = 3.0;
                  PutInput(1,4,&Val);
                  Val = 0.0; //UC INTERP
                  Val = 0.0; //UC_INTEN; 1_LT1 == "1" ) Val = 1.0; if( m_PATIENT_COMPLAINT_1_3 == "1" ) Val = 2.0; if( m_PATIENT_COMPLAINT_1_3 == "1" ) Val = 2.0; if( m_PATIENT_COMPLAINT_1_4 == "1" ) Val = 3.0, if( m_PATIENT_COMPLAINT_1_7 == "1" ) Val = 4.0; if( m_PATIENT_COMPLAINT_1_1 == "1" ) Val = 5.0; if( m_PATIENT_COMPLAINT_1_1 == "1" ) Val = 6.0; PULINDUC(i, 5, ZVal);
                  Val = ((m_0_COMP == "1")?1.0:0.0);
                  PutInput (i, 6, &Val);
                  Val = ((m FFN RESULT == "1")?1.0:0.0);
PutInput(1,7,\overline{\&}Val);
                   // iterate network
                   IterateNet(i):
                  // build consensus result
                  m_NetPos3 += GetState(i,3,1) / 8.0;
                  m NetNeg3 += GetState(i,3,2) / 8.0;
         m NetVal3 = 25.0 * (m NetPos3-m NetNeq3);
char* CPTDinpDoc::time2str( const CTime& tm )
         sprintf(tstr, "%d/%d/%d", tm.GetMonth(), tm.GetDay(),
(tm.GetYear()-1900));
         return tstr:
ĆTime& CPTDinpDoc::str2time( CString& str )
         int m,d,y;
```

```
int ofs;
       strcpy(tstr,str);
       m = d = y = 0;
       ofs = 0;
       while(tstr[ofs] == ' ') ofs++; // skip spaces;
       m = atoi(&tstr[ofs]);
       while(tstr[ofs] >= '0' && tstr[ofs] <= '9') ofs++; // skip numbe:
while(tstr[ofs] == '/' || tstr[ofs] == '/') ofs++; // skip delimiter
                                                                    ofs++; // skip number
       d = atoi(&tstr[ofs]);
       while(tstr[ofs] >= '0' && tstr[ofs] <= '9') ofs++; // skip number while(tstr[ofs] == '/' || tstr[ofs] == '-') ofs++; // skip delimiter
       y = atoi(&tstr[ofs]);
if(Y<100) y += 1900;</pre>
       tim = CTime(y, m, d, 0, 0, 0);
       return(tim);
}
void CPTDinpDoc::OnRecGoto()
       CPtdGoto dlg;
       int i;
       // Define and run a dialog to select the search mode and rec number
etc.
       dlq.m IDStr = IDStr;
       dlg.m_RecNum = CurRecord + 1;
       dlg.m GotoMode = GotoMode;
       if(dlg.DoModal() == IDOK) {
               GotoMode = dlg.m GotoMode;
               switch (GotoMode) -{
               case 0:
                       // record number
                      CurRecord = dlg.m_RecNum - 1;
if (CurRecord < 0) CurRecord = 0;</pre>
                      if (CurRecord > NumRecords - 1 ) CurRecord = NumRecords -
1;
                      get rec(Rec);
                      break;
               case 1:
                      // ID string
                      for (i = 0; i < NumRecords; i++) {
    CurRecord = i;</pre>
                              get rec(Rec);
                              if ( IDStr == m_LAB_ID ) break;
                      break;
               default:
                       // Do nothing
                      break;
               }
        }
void CPTDinpDoc::OnFileMruFile1()
```

```
GetPrivateProfileString("Recent File List",
                                                                          //lpszSection
                                                                   //lpszEntry
                                     "File1",
                                                                  // lpszDefault
// lpszReturnBuffer
// cbReturnBuffer
                                     "untitled",
                                     PathName,
                                     128,
                                                                          // lpszFilename
                                     "ptdinp.ini");
       get file();
void CPTDinpDoc::OnFileMruFile2()
                                                                          //lpszSection
       GetPrivateProfileString ("Recent File List",
                                     "File2",
                                                                   //lpszEntry
                                                                  // lpszDefault
// lpszReturnBuffer
// cbReturnBuffer
                                     "untitled"
                                     PathName,
                                     128,
                                     "ptdinp.ini");
                                                                          // lpszFilename
       get_file();
void CPTDinpDoc::OnFileMruFile3()
       GetPrivateProfileString ("Recent File List",
                                                                          //lpszSection
                                     "File3",
                                                                   //lpszEntry
                                     "untitled",
                                                                   // lpszDefault
// lpszReturnBuffer
                                     PathName,
                                                                   // cbReturnBuffer
                                     128.
                                     "ptdinp.ini");
                                                                          // lpszFilename
       get file();
void CPTDinpDoc::OnFileMruFile4()
       GetPrivateProfileString ("Recent File List",
                                                                          //lpszSection
                                                                   //lpszEntry
                                     "File4",
                                     "untitled",
                                                                   // lpszDefault
// lpszReturnBuffer
                                     PathName,
                                     128.
                                                                   // cbReturnBuffer
                                     "ptdinp.ini");
                                                                          // lpszFilename
       get file();
void CPTDinpDoc::OnFileOpen()
//FILE *fp;
       // Get the File Name
       // Get the file Name
Crilebialog Dig (TRUE, "fdb",NULL,OFN_OVERWRITEPROMPT ,
"FDB iles (*.fbd) |*.fdb||");
Dig.m_ofn.lpstrTitle = "Open Fixed length DataBase file";
       if ( Dlq.DoModal() == IDOK ) {
               strcpy(PathName,Dlg.GetPathName());
              AfxGetApp () ->AddToRecentFileList (PathName);
```

```
get file();
#ifdef NOT
      CurRecord = 0;
      fp = fopen(PathName, "rb");
      if(fp==NULL) {
            fp = fopen(PathName, "wb");
            if(fp!=NULL) {
                   fwrite (Rec, sizeof (char), (REC LENGTH+2L), fp);
                   fclose(fp);
            NumRecords = 1;
            CurRecord = 0;
            InitializeRec();
            put_rec(Rec);
get_rec(Rec);
      } else {
            CurRecord = 0;
            if (fread(Rec, sizeof(char), (REC_LENGTH+2 L), fp) == (REC_LENGTH+
2 L) {
                   get rec(Rec);
            fseek (fp, OL, SEEK END);
            NumRecords = ftell(fp) / (REC_LENGTH+2L);
            fclose(fp);
#endif
void CPTDinpDoc::get-file()
FILE *fp;
      CurRecord = 0;
      fp = fopen(PathName, "rb")
      if(fp==NULL) {
            fp = fopen(PathName, "wb");
            if (fp!=NULL)
                   fwrite (Rec, sizeof (char), (REC_LENGTH+2L), fp);
                   fclose(fp);
            NumRecords = 1;
            CurRecord = 0;
             InitializeRec();
            put_rec(Rec);
            get_rec(Rec);
      } else {
            CurRecord = 0;
             if (fread (Rec, sizeof (char), (REC_LENGTH+2L), fp) == (REC_LENGTH+2L))
                   get rec(Rec);
            fseek(fp, OL, SEEK END);
            NumRecords = ftell(fp) / (REC LENGTH+2L)
            fclose(fp);
      }
```

```
((CPTDinpApp*)AfxGetApp())->SaveMRU();
}
PTDinp.cpp : Defines the class behaviors for the application.
#include "stdafx.h"
#include "PTDinp.h"
#include "mainfrm.h"
#include "PTDidoc.h"
#include "PTDivw.h"
#ifdef _DEBUG
#undef THIS_FILE
static char BASED CODE THIS FILE[] = FILE ;
#endif
// CPTDinpApp
BEGIN MESSAGE MAP (CPTDinpApp, CWinApp)
    //{{AFX MSG MAP(CPTDinpApp)
ON COMMAND [ID APP ABOUT, OnAppAbout)
ON_COMMAND (ID_CLR_SUBFIELDS, OnClrSubfields)
    ON COMMAND (ID EDIT MODE, OnEditMode)
    //}}AFX_MSG_MAP
    // Standard file based document commands
    ON_COMMAND(ID_FILE_NEW, CWINApp::OnFileNew)
ON_COMMAND(ID_FILE_OPEN, CWINApp::OnFileOpen)
    // Standard print setup command
    ON_COMMAND(ID_FILE_PRINT_SETUP, CWinApp::OnFilePrintSetup)
END MESSAGE MAP()
// CPTDinpApp construction
CPTDinpApp::CPTDinpApp()
    // TODO: add construction code here,
    // Place all significant initialization in InitInstance
    m pDoc = NULL;
    EditMode = FALSE;
    ClearSubfields = FALSE;
// The one and only CPTDinpApp object
CPTDinpApp NEAR theApp;
// CPTDinpApp initialization
```

```
BOOL CPTDinpApp::Initlnstance()
      // Standard initialization
      // If you are not using these features and wish to reduce the size
     // of your final executable, you should remove from the following // the specific initialization routines you do not need.
      SetDialogBkColor();
                             // Set dialog background color to gray
     LoadStdProfileSettings();
                                    // Load standard INI file options
(including MRU)
      // Register the application's document templates. Document templates
     // serve as the connection between documents, frame windows and
      CSingleDocTemplate* pDocTemplate;
     pDocTemplate = new CSingleDocTemplate(
            IDR MAINFRAME.
            RUNTIME_CLASS(CPTDinpDoc),
RUNTIME_CLASS(CMainFrame),
RUNTIME_CLASS(CPTDinpView));
                                          // main SDI frame window
      AddDocTemplate(pDocTemplate);
      // create a new (empty) document
     OnFileNew();
      if (m lpCmdLine[0] != '\0')
            // TODO: add command line processing here
      ClearSubfields = TRUE;
      // check the menu item
      CMenu* pMenu = Af xGetApp() ->m pMainWnd->GetMenu()
      pMenu->CheckMenuItem. (ID CLR SUB FIELDS, MF CHECKED)
      return TRUE;
// CAboutDlg dialog used for App About
class CAboutDlg : public CDialog
public:
      CaboutDlg();
// Dialog Data
      //[(AFX_DATA(CAboutDlg)
enum { IDD = IDD_ABOUTBOX }
      //}}AFX DATA
// Implementation
protected:
      virtual void DoDataExchange(CDataExchange* pDX); //DDX/DDV support
      //{{AFX_MSG(CAboutDlq)
            /7 No message handlers
      //}}AFX_MSG
DECLARE MESSAGE MAP()
```

```
CAboutDlg::CaboutDlg() : CDialog(CAboutDlg::IDD)
     //{{AFX_DATA_INIT(CAboutDlg)
//}}AFX_DATA_INIT
void CAboutDlg::DoDataExchange(CDataExchange* pDX)
     CDialog::DoDataExchange(pDX);
     //{{AFX_DATA_MAP(CAboutDlg)
//{{AFX_DATA_MAP
BEGIN MESSAGE MAP (CAboutDlg, CDialog)
     //{{AFX_MSG_MAP(CAboutDlg)
// No message handlers
//}}AFX_MSG_MAP
END MESSAGE MAP()
// App command to run the dialog
void CPTDinpApp::OnAppAbout()
     CAboutDlg aboutDlg;
     aboutDlq.DoModal();
//CPTDinpApp commands
void CPTDinpApp::OnClrSubfields ( )
      if(ClearSubfields) = FALSE;
           // uncheck the menu item
CMenu* pMenu = AfxGetApp ( )>m pMainWnd->GetMenu ( );
           pMenu->CheckMenuItem (ID CLR SUBFIELDS, MF UNCHECKED);
      } else {
           ClearSubfields = TRUE;
           // check the menu item
CMenu* pMenu = Af xGetApp ( ) ->m_pMainWnd->GetMenu ( );
           pMenu->CheckMenuItem(ID CLR SUBFIELDS, MF CHECKED);
void CPTDinpApp::OnEditMode ( )
     if (Edit Mode)
           EditMode = FALSE;
            // uncheck the menu item
           CMenu* pMenu = AfxGetAppo ( )>m pMainWnd->GetMenu ( );
           pMenu->CheckMenuItem(ID_EDIT_MODE,MF_UNCHECKED);
} else {
           EditMode = TRUE;
```

```
// check the menu item
           CMenu* pMenu = AfxGetApp ( )->m_pMainWnd->GetMenu ( );
           pMenu->CheckMenuitem(ID EDIT MODE, MF CHECKED);
}
void CPTDinpApp::SaveMRU ( )
     SaveStdProfileSettings ();
; endoinp.def : Declares the module parameters for the application.
           ENDOINP
DESCRIPTION 'IENDOINP Windows Application'
EXETYPE
                WINDOWS
                PRELOAD MOVEABLE DISCARDABLE
DATA
           PRELOAD MOVEABLE MULTIPLE
                1024 ;
                           initial heap size
; Stack size is passed as argument to linker's /STACK option
// PTDinp.h : main header file for the PTDINP application
#ifndef AFXWIN H
     #error include 'stdafx.h' before including this file for PCH
#include "resource.h"
                      // main symbols
CPTDinpApp:
  See PTDinp.cpp for the implementation of this class
#include "PTDidoc.h"
class CPTDinpApp : public CWinApp
public:
     CPTDinpApp();
     CPTDinpDoc *m pDoc;
     int NextDlgPage;
     int LastDlgPage;
     BOOL EditMode;
     BOOL ClearSubfields;
     CPTDinpDoc *GetDoco ( ) {
           return m pDoc;
     void SaveMRU( void );
// Overrides
    virtual BOOL InitInstance ( );
   Implementation
```

```
//{{AFX_MSG(CPTDinpApp)
    afx msg void OnAppAbout ();
afx msg void OnClrSubfields ();
    afx msg void OnEditMode ( );
    //ITAFX MSG
    DECLARE MESSAGE MAP( )
// PTDivw.cop : implementation of the CPTDinpView class
#include "stdafx.h"
#include "PTDinp.h"
#include "PTDidoc.h"
#include "PTDivw.h"
#include "PTDdlql.h"
              DEBUG
#ifdef
#undef
         THIS FILE
static char BASED CODE THIS FILE[] = __FILE__;
// CPTDinpView
IMPLEMENT DYNCREATE (CPTDinpView, Cview)
BEGIN_MESSAGE_MAP(CPTDinpView, CView)
    //{ {AFX_MSG_MAP(CPTDinpView)
    ON COMMAND (ID DATA EDIT, OnDataEdit)
ON COMMAND(ID_DATA_NEW, OnDataNew)
    // } }AFX MSG MAP
    // Standard printing commands
    ON COMMAND(ID_FILE_PRINT, CView::OnFilePrint)
ON COMMAND(ID_FILE_PRINT_PREVIEW, CView::OnFilePrintPreview)
END MESSAGE MAP ( )
// CPTDinpView construction/destruction
CPTDinpView::CPTDinpView ( )
     // TODO: add construction code here
    ShowPrt = FALSE:
CPTDinpView::-CPTDinpView ( )
CPTDinpView drawing
void CheckOut(CDC* pDC, char *str, int xpos, int ypos, int val)
    pDC->TextOut(xpos, ypos, str, strlen(str)
```

```
pDC ->Rectangle (CRect ( xpos - 6*29, ypos - 2*29, xpos - 2*29,
        - 6*29));
ypos
      if(val)
             CBrush brush (RGB(0,0,0));
             pDC->FillRect(Crect (xpos - 6*29, ypos - 2*29, xpos -
2*29, ypos 6*29), &brush)
11
      pDC->MoveTo(xpos - 6*29, ypos - 2*29);
      pDC->LineTo( xpos - 2*29, ypos - 6*29);
//
11
      pDC->MoveTo(xpos - 6*29, ypos - 6*29);
      pDC->LineTo( xpos - 2*29, ypos -2*29);
void CPTDinpView::OnDraw(CDC* pDC)
      CPTDinpDoc* pDoc = GetDocument ( );
CPTDinpApp* pApp = ((CPTDinpApp*)AfxGetApp ( );
ASSERT_VALID(pDoc);
CFont font10, font12;
TEXTMETRIC tm;
int nHeight;
int i:
// TODO: add draw code for native data here
pDC->SetMapMode(MM TWIPS);
fontl2.CreateFont(-240,0,0,0,500, FALSE, FALSE, 0, ANSI-CHARSET,
             OUT DEFAULT PRECIS, CLIP DEFAULT PRECIS,
DEFAULT QUAZITY, DEFAULT PITCH FF ROMAN, "Times New Roman");
Font = (CFont*) DDC->SelectOb-ect[&font12];
CFont* pOldFont =
pDC->GetTextMetrics(&tm);
nHeight = tm.tmHeight + tm.tmExternalLeading;
char str[2561;
char name [64];
//pDC- >Rectangle (CRect (0, 0, 11505, -15105)); // FULL PAGE RECT
if(ShowPrt) {
      if(!pApp->EditMode)
             sprintf(str,"
                                        ADEZA DIAGNOSTIC SERVICES"):
             pDC->TextOut( 2440, ((-1 * nHeight) - 720), str, strlen(str));
             sprintf (str, "Pre-Term Delivery Risk Assessment Software:");
             PDC->TextOut( 2440, ((-2 * nHeight) - 720), str, strlen(str) );
                                                     Test Report Form ");
             sprintf(str,"
             pDC->TextOut( 2440, ((-3 * nHeight) - 720), str, strlen(str));
    elśe
       sprintf(str, "File: %s
                                        ",pDoc->PathName);
       pDC->TextOut( 720, ((-1 *
                                              nHeight) - 720), str, strlen(str)
);
       sprintf(str, "Current record: %ld
                                                     if, pDoc->CurRecord+1);
      pDC->TextOut( 720, ((-2 * nHeight) - 720), str, strlen(str)
       sprintf(str, "Number of records: %ld "pDoc->NumRecords);
```

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```
pDC->TextOut( 720, ((-3 * nHeight) - 720), str, strlen(str) );
if((ShowPrt && !pApp->EditMode) | (!ShowPrt))
       sprintf(str," Lab ID #:");
       pDC->TextOut( 720, ((-5 * nHeight) - 720), str, strlen(str)
                                                                                 ) :
       sprintf(str."
                                 %s ",PDoc->m LAB ID);
                          4320, ((-5 * nHeightT - 720), str. strlen(str) );
       pDC->TextOut (
       strcpy( name,
                                  pDoc->m_NAME_F);
      strcat ( name,
      strcat( name.
                                  pDoc->m NAME MI);
                                          ·<del>"</del>);
       strcat ( name,
       strcat ( name,
                                  pDcc->m NAME L);
       sprintf(str,"
                                    Patient Name: ");
      pDC->TextOut (
                                  720, ((-6 * nHeight) - 720), str, strlen(str)
) :
       sprintf(str,"
                                  %s ",name);
4320, ((-6 * nHeight) - 720), str,
      pDC->TextOut (
strlen(str));
       pDoc->RunNets(pDoc->CurRecord);
      ppote-remnets.ppote-remneted by sprintf (str, "Pre-term Delivery Risk <34.6wks: ");
pDC->TextOut( 720, H-7 * nHeight) - 720), str, strlen(str) );
sprintf(str, "%lf ",pDoc->m NetPosl);
pDC->TextOut( 4320, ((-7 * nileight) - 720), str, strlen(str)
       sprintf(str,"
                                         Pre-term Delivery Risk <7 days: ");
                                         720, ((-8 * nHeight) - 720), str,
      pDC->TextOut (
strlen(str) ):
      sprintf(str,"
                                                ",pDoc->m - NetPos2);
                                         %1 f
      pDC->TextOut (
                                         4320, ((-8 * nHeight) - 720), str,
strlen(str) );
       sprintf(str."
                                        Pre-term Delivery Risk <14 days: ");
      pDC->TextOut (
                                         720, ((-9 * nHeight) - 720), str,
strlen(str) );
       sprintf(str."
                                        %lf
                                              ",pDoc->m - NetPos3);
                                        4320, ((-9 * nHeight) 720), str.
       pDC->TextOut (
strlen(str) );
                                  - ACOG SYNPTOMS == "0") {
       //if(pDoc->m
          sprintf (str, "DISCLAIMER APPLIES:");
             pDC->TextOut( 720, ((-12 * nHeight) - 720), str, strlen(str)
);
       //}
       for( i = 5; i <= 10; i++) {
       pDC->MoveTo(700,((-i
                                         nHeight)
                                                       720));
       pDC->LineTo(8640,((-i
                                        nHeight)
                                                      720));
                                               nHeight) - 720));
       pDC->MoveTo(700, ((-5
       pDC->LineTo(700, ((-10
pDC->MoveTo(4320,((-5
                                                       nHeight) - 720))
nHeight) - 720));
       pDC->LineTo (4320, ((10 * nHeight) - 720)
       pDC->MoveTo(8640,((-5
                                        nHeight)
                                                      720));
       pDC->LineTo(8640,((-10 * nHeight) - 720));
} else {
```

```
font10.CreateFont(-200,0,0,0,500, FALSE, FALSE, 0, ANSI CHARSET,
       OUT DEFAULT PRECIS, CLIP DEFAULT PRECIS,
       DEFAULT QUALITY, DEFAULT_PITCH I-FF_ROMAN, "Times New Roman");
pDC->SelectObject(&fontl0);
//pDC->Rectangle(CRect( 0,0,11505,-15105));
pDC->Rectangle(CRect( 1*29,-4*29,397*29,-22*29));
pDC->Rectangle(CRect( 1*29,-24*29,397*29,-42*29));
pDC->Rectangle(CRect(1*29,-44*29,187*29,-95*29));
pDC->Rectangle(CRect( 187*29, -44*29, 397*29, -95*29));
pDC->Rectangle(CRect( 1*29,-97*29,397*29,-114*29));
pDC->Rectangle(CRect( 1*29,-116*29,397*29,-218*29));
pDC->Rectangle(CRect( 1*29, -220*29, 397*29, -240*29));
pDC->Rectangle(CRect(1*29, -242*29, 187*29, -348*29));
DDC->Rectangle(CRect( 187*29,-242*29,397*29,-348*29));
DDC->Rectangle(CRect( 1*29,-350*29,397*29,-375*29));
DDC->Rectangle(CRect( 1*29,-377*29,397*29,-404*29));
pDC->Rectangle(CRect( 1*29, -406*29, 397*29, -425*29));
pDC->Rectangle(CRect( 1*29, -427*29, 397*29, -470*29) )
sprintf (str, "ADEZA Pre-Term Delivery Risk Assessment ");
pDC->Textout( 7*29f-10*29, str, strlen(str) );
sprintf(str, "Lab ID #: %s", pDoc->m - LAB_ID);
pDC->TextOut( 267*29, -10*29, str, strlen(str) );
sprintf(st.r, "PATIENT INFORMATION");
pDC->TextOut( 159*29, -29*29, str, strlen(str) );
strcpy( name, pDoc->m NAME L);
sprintf(str, "Name(las'E) %s", name);
pDC->TextOut( 7*29,-51*29, str, stzlen(str) );
strcpy( name, pDoc->m NAME F);
sprintf(str, "First %s, name);
PDC->TextOut(99*29,-51*29, str, strlen(str));
strcpy( name, pDoc->m NAME MI);
sprintf(str, "M %s", name);
pDC->TextOut ( 160*29, -51*29, str, strlen(str) );
sprintf(str, "DOB %s", pDoc->m DATE OF BIRTH);
pDC->TextOut ( 7*29, -69*29, str,
                                            strlen(str) ):
sprintf(str, "Ethnic origin:");
pDC->TextOut(192*29,-40*29, str, strlen(str));
CheckOut(pDC, "Caucasian", 248*29,-48*29, (pDoc->m_ETHNIC_ORIGIN_WHITE = =
Checkout (pDC, "African American", 298*29, -48*29,
(pDoc->m ETHNIC ORIGIN BLACK ==
CheckOut(pDC, "Asian", 368*29, -48*29, (pDoc->m_ETHNIC_ORIGIN_ASIAN = ="1")
CheckOut (pDC, "Hispanic", 248*29, -59*29, (pDoc- >m_ETHNIC_ORIGIN_HISPANIC =
Checkout (pDC, "Native American", 298*29,-59*29,
(pDoc->m_ETHNIC_ORIGIN_NATIVE AME
RICAN = ="1") );
CheckOut(pDC, "Other", 368*29, -59*29, (pDoc->m ETHNIC-ORIGIN-OTHER
sprintf(str, "Marital status:");
pDC->TextOut( 192*29, -72*29, str, strlen(str) );
CheckOut (pDC, "Married", 248*29, -72*29, (pDoc->m MARITAL STATUS MARRIED =
="1")
CheckOut (pDC, "Single", 288*29,-72*29, (pDoc->m - MARITAL_STATUS_SINGLE CheckOut (pDC, "Divorced/Separated", 322*29,-72*f9,
(pDoc-->m MARITAL STATUS DIVORC
ED = ="1") ) ;
```

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```
CheckOut(pDC, "Widowed", 248*29, -83*29, (pDoc->m MARITAL STATUS WIDOWED = =
"1") )
CheckOut (PDC, "Living with partner", 293*29,-83*29,
(pDoc->m_MARITAL_STATUS_LWP=
= "1" > ) :
CheckOut (pDC, "Other", 368*29, -83*29, (pDoc->m MARITAL STATUS OTHER = =
"1");
sprintf (str, "PATIENT HISTORY AND CLINICAL INFORMATION");
pDC->TextOut( 117*29,-102*29, str, strlen(str) );
sprintf(str, "At the time of sampling was the patient experiencing signs and
symp
toms of possible preterm labor?");
pDC->TextOut( 7*29,-119*29, str, strlen(str) );
Checkout (pDC, "Yes", 339*29, -119*29, (pDoc->m ACOG SYMPTOMS = = "1") );
CheckOut(pDC, "No", 370*29,-119*29, (pDoc->m_ACOG_SYMPTOMS sprintf(str,"It yes, please mark all that apply. ");
DDC->TextOut( 7x29,-134*29, str, strlen(str) );
CheckOut(pDC, "Uterine contractions with or without pain", 19*29,-145*29,
(DDoc->
m PATIENT COMPLAINT 1 = = "1") );
sprintf(str."Number7hr");
PDC->TextOut( 22*29,-158*29, str, strlen(str) );
Checkout (pDC, "<1", 73*29,-158*29, (pDoc->m PATIENT COMPLAINT 1 LT1 = =
"1") );
CheckOut (pDC,111-3", 105*29,-158*29, (pDoc->m_PATIENT_COMPLAINT_1_1_3 = =
CheckOut (pDC, "4-6'1, 137*29, -158*29, (pDoc->m PATIENT COMPLAINT 1 4 6 = =
Checkout (pDC, "7-911, 73*29, -170*29, (pDoc->m_PATIENT_COMPLAINT_1_7_9 ==
"1") );
CheckOut (pDC, "10-12", 105*29, -170*29, (pDoc7>m PATIENT COMPLAINT 1 10 12 =
CheckOut (pDC, ">12", 137*29, -170*29, (pDoc->m PATIENT COMPLAINT 1 GT12 = =
"1") ;
CheckOut (pDC, "Vaginal bleeding", 19*29,-181*f9, (pDo-c -
>m VAGINAL BLEEDING = = "1"
) T;
Checkout (pDC, "Trace", 29*29, -194*29, (pDoc->m VAGINAL BLEEDING TRACE =
CheckOut (pDC, "Med", 64*29, -194*29, (pDoc->m VAGINAL BEEEDING MEDIUM = =
"1") );
Checkout (pDC, "Gross", 94*29, -194*29,
                                                    (pDoc->m VAGINAL BLEEDING
GROSS
     "1") );
CheckOut (PDC, "Patient is not ""feeling right"7111, 19*2-9,-205*29-,
(pDoc->m PATIENT
COMPLAINT 6 = = -"1") );
CheckOut (pDC, "Bleeding during the second or third trimester",
167*29,-145*29,
                           (p
Doc->m-PATIENT COMPLAINT 3 = "1") );
Checkout (pDC, "Intermittent lower abdominal pain, dull, low backpain,
pelvic pres
sure", 167*29, -157*29, (pDoc->m PATIENT COMPLAINT 2 = = "1") );
Checkout (pDC, "Change in vaginal discharge amount, color, or consistency",
167
*29,-181*29, (pDoc->m PATIENT COMPLAINT 5= ="1") );
```

```
Chec kOut (pDC, 7Menstrual- like crimping (with or without diarrhea)".
167*29, -193*2
9, (pDoc->m PATIENT COMPLAINT 4 = = "1") );
sprintf (str, "Gestational Age: EGA by first trimester sono %s ",
pDoc->m EGA BY S
ONO);
PDC->TextOut( 7*29,-225*29, str, strlen(str) );
sprintf (str, "EGA by LMP %s", pDoc->m EGA BY LMP);
pDC->TextOut( 197*29,-225*29, str, strlen(str) );
sprintf(str, "EGA at sampling %s",pDoc->m_EGA_AT_SAMPLING);
pDC->TextOut( 287*29, -225*29, str, strlen(str)
sprintf(str, "Previous Pregnancy: Please mark all that apply.");
pDC->TextOut( 7*29,-249*29, str, strlen(str) );
pDC-31eXtout (pDC, "Previous pregnancy, no complications", 19*29,-260*29, (pDoc-m_1 COMP = ="l") );
Checkout (pDC, "Bistory of Preterm delivery", 19*29, -272*29,
(pDoc->m 2 COMP = = "1") );
sprintf(st.r, "if Yes, how many?");
PDC--TextOut( 22*29, 284*29; str, stzlen(str) );
CheckOut(pDC, "2", 12*29, -284*29; (pDoc-m2_COMP_1 = "1',))
CheckOut(pDC, "2", 12*29, -284*29; (pDoc-m2_COMP_2 = "1")
CheckOut (pDC, ">211, 147*29, -284*29, (pDoc->m 2 COMP 3 = = "1") );
CheckOut (pDC, "History of Preterm PROM" 19*29, - 269*29, (pDoc->m 3 COMP = =
"1"));
CheckOut(pDC, "History of incompetent cervix", 19*29,-308*29,
(pDoc->m 4 COMP = = "1") );
CheckOut TpDC, "History of PIH/preeclampsia", 19*29,-320*29, (pDoc->m 5 COMP
= = "1" ) );
CheckOut(pDC, "History of SAB prior to 20 wks", 19*29,-332*29,
(pDoc->m 6 COMP = = "1") );
CheckOut(pDC, "Multiple Gestation:", 209*29, -272*29,
(pDoc->m_MULTIPLE_GESTATION == "1"));
CheckOut(pDC, "Twins", 284*29, -272*29, (pDoc->m MULTIPLE GESTATION TWINS ==
"1") );
CheckOut(pDC, "Triplets", 317*29,-272*29, (pDoc - >m_MULTI
PLE GESTATION TRIPLETS = = "1") );
CheckOut(pDC, "Quads", 356*29,-272*29, (pDoc->m_MULTIPLE_GESTATION_QUADS =
= "1") );
CheckOut(pDC, "Uterine or cervical abnormality", 209*29,-284*29,
pDoc->m UTCERV ABNORMALITY = - "1") );
CheckOut(pDC, "Cerclage", 209*29, -296*29, (pDoc->m_CERVICAL CERCLAGE == "1")
); CheckOut(pDC, "Gestational Diabetes". 209*29, -308*-f9, (pDo
c7>m GESTATIONAL DIABETES = = "1"));
CheckOut(pDC, "Hypertensive Disorders". 209*29,-320*29,
(pDoc->m HYPERTENSIVE DISORDERS = ="1") );
sprint f (s tr, "Cervical Status immediately following sample
collection:");
pDC->TextOut( 7*29,-352*29, str, stzlen(str) );
sprintf(str, "Dilatation (cm)");
PDC->TextOut(9*29,-364*29, str, strlen(str) CheckOut(pDC,"<1",
PDC->TextOut ( 9*29, -364*29, str, strlen(str) CheckOut(pDC, "<1", classes, strlen(str) CheckOut(pDC, "<1"); CheckOut(pDC, '11", 85*29, -364*29, (pDcc->m DILITATION II = "1")); CheckOut(pDC, '11", 85*29, -364*29, (pDcc->m DILITATION 1 = = "1")); CheckOut (pDC, '112', 102*29, -364*29, (pDcc->m DILITATION 2= "1")); CheckOut (pDC, '121', 123*29, -364*29, (pDcc->m DILITATION 2= "1")); CheckOut (pDC, '2-3", 140*29, -364*29, (pDcc->m DILITATION 3= "1")); CheckOut (pDC, '13", 163*29, -364*29, (pDcc->m DILATION 3= "1")); CheckOut (pDC, '13", 163*29, -364*29, (pDcc->m DILATION 3= "1"));
Checkout (pDC, ">3'1, 180*29, -364*29, (pDoc->m, DILATION GT3 = = "1") );
Checkout (pDC, "Unknown", 201*29, -364*29, (pDoc->m_DILTTATION_UNKNOWN = =
"1"));
sprintf(str, "Cervical consistancy");
```

```
pDC->TextOut( 249*29, -364*29, str, strlen(str) );
Checkout (pDC, "Firm", 324*29, -364*29, (pDoc->m CERVICAL CONSISTANCY FIRM =
 = "1") );
CheckOut (pDC, "Mod", 350*29, -364*29, (pDoc->m_CERVICAL_CONSISTANCY_MOD = =
Checkout (pDC, "Soft", 376*29, -364*29, (pDoc->m CERVICAL CONSISTANCY SOFT =
= "1" ) ):
sprintf (str, "Medications at Time of Test (check all that apply)");
pDC->TextOut (729, -380*29, str, strlen(str));
CheckOut(pDC, "Antibiotics", 23*29, -392*29, (pDoc->m_ANTIBIOTICS = = "1")
CheckOut (pDC, "Corticosteroids", 76*29, -392*29, (pDoc->m CORTICOSTEROIDS = =
"1"));
Checkout (pDC, "Tocolytis", 144*29, -392*29, (pDoc->m_TOYOLYTICS = = "1" ); CheckOut (pDC, "Insulin", 193*29, -392*29, (pDoc->m_INSULIN = = "1"));
Chec kout (pDC, "Antihypertensives ", 234*29,-392*29, (pDoc->m ANTIHYPERTENSIVES = = "1") );
Checkout (pDC, "None", 311*29, 392*29, (pDoc->m MEDICATIONS_NONE == "1") ); Checkout (pDC, "Unknown", 348*29,..392*29, (pDoc'~7>m MEDICATIZSNS-UNKNOWN sprintf (str, "Current Pregnancy: G: %s", pDoc->m (gRAVITY); pDC->TextOut( 195*29,-249*29, str, strlen(str));
sprintf(stz,"P: %s", pDoc->m_PARITY);
pDC->Textout( 303*29f-249*29, str, strlen(str) );
sprintf (str,"A: %s", pDoc->m ABORTIONS);
pDC->Textout( 343*29,-249*29, str, strlen(str) );
sprintf (str, "Qualitative fFN Elisa Test Results:");
PDC->TextOut( 7*29,-411*29, str, strlen(str) );
CheckOut (pDC, "Positive", 144*29, 411*29, (pDoc->m FFN RESULT = = "1") );
CheckOut (pDC, "Negative", 234*29, 411*29, (pDoc->m FFN RESULT = = "0") );
sprintf(str, "Pre-term Delivery Risk <34.6wks: ");
pDC->TextOut( 7*29,-432*29, str, strlen(str) );
sprintf(str," %If ",pDoc->m - NetPosl);
pDC->TextOut( 150*29, -432*29, str, strlen(str) );
sprintf(str, "Pre-term Delivery Risk <7 days: ");
pDC->TextOut( 7*29, -444*29, str, strlen(str) );
sprintf(str," %If ",pDoc->m - NetPos2);
PDC->TextOut( 150*29, -444*29, str, strlen(str) );
sprintf (str, "Pre-term Delivery Risk <14 days: ");
pDC->TextOut( 7*29, -456*29, str, strlen(str) );
sprintf(str, " %If ",pDoc->m NetPos3);
pDC->TextOut( 150*29, -456*29, str, strlen(str) );
//if(pDoc->m ACOG SYNPTOMS = = "0") {
         sprintf (str, "DISCLAINER APPLIES: ");
pDC->TextOut( 7*29, -480*29, str, strlen(str) );
111
pDC->SelectObject(pOldFont);
// CPTDinpView printing
BOOL CPTDinpView::OnPreparePrinting(CPrintlnfo* pInfo)
         // default preparation
         return DoPreparePrinting(pInfo);
```

```
void CPTDinpView::OnBeginPrinting(CDC* /*pDC*/, CPrintInfo* /*pInfo*/)
          TODO: add extra initialization before printing
     ShowPrt = TRUE:
void CPTDinpView::OnEndPrinting(CDC* /*pDC*/, CPrintInfo* /*pInfo*/)
      // TODO: add cleanup after printing
     ShowPrt = FALSE:
     GetDocument ( ) -> UpdateAllViews (NULL);
//CPTDinpView diagnostics
#ifdef DEBUG
void CPfDinpView:: AssertValid ( ) const
     CView:: AssertValid ( ):
I void CPTDinpView::Dump(CDumpContext& dc) const
     CView::Dump(dc);
CPTDinpDoc* CPTDinpView: :GetDocument ( ) // non-debug version is inline
     ASSERT (m pDocument -> IsKindOf (RUNTIME CLASS (CPTDinpDoc)));
     return (CPTDinpDoc*)m pDocument;
#endif // DEBUG
void CPTDinpView::Edit ( )
     CPTDInp dlq;
     int val:
      ((CPTDinpApp*)AfxGetApp ( ) ) -> NextDlgPage = 1;
m pSet = GetDocument ( );
// initialize all the variables in the record to allow smooth cancel
///dlg.m - DATE OF DATA ENTRY = m P Set->m DATE OF DATA-ENTRY;
//dlg.m_PATIENT_AGE = M_pSet->m_PATIENT-AGE;
//Cstring m.. DATE OF BIRTH;
dlg.m_DATE_OF_BIRTH = m,_pSet->m_DATE_OF_BIRTH;
//CString m_NAME_F;
dlg.m_NAME_F = m_pSet - >m_NAME_F;
//CString m_NAME_L;
//dlg.m_NAME_L = m_pSet ->m_NAME_L;
//CString m_NAME_MI;
dlg.m_NAME_RI = M_pSet->m_NAME_MI;
```

```
//BOOL
            m 1_COMP;
//dlg.m 1 COMP = (m_pSet->m_l COMP = = "1");
            m_2_COMP;
//BOOL
//dlg.m 2 COMP = (m pSet->m 2 COMP = = "1");
//BOOL
            m_3_COMP;
//dlg.m 3 COMP = (m pSet->m 3 COMP = = "1");
//BOOL
            m 4 COMP;
//dlg.m_4 COMP = (m_pSet->m_4_COMP = = "1");
//BOOL m 5_COMP;

//BOOL m 5_COMP = (m_pSet->m_5_COMP = = "1");

//BOOL m 6_COMP;

//dlg.m_6_COMP = (m_pSet->m_6_COMP = = "1");
            m ACOG N;
m ANTIBIOTICS =:
//BOOL
//dlg.m ANTIBIOTICS = (m pSet->m ANTIBIOTICS = = "1");
//BOOL
            m_AntiHyper;
//dlg.m_AntiHyper = (m_pSet->m_ANTIHYPERTENSIVES = = "1");
//BOOL
            m CervCerclage;
//dlg.m_CervCerclage = (m_pSet->m_CERVICAL_CERCLAGE = = "1");
//BOOL
            m_CervFirm;
//dlg.m_CervFirm = (m_pSet->m_CERVICAL_CONSISTANCY_FIRM = = "1");
//BOOL m_CervMod;
//dlg.m_CervMod = (m_pSet->m_CERVICAL_CONSISTANCY_MOD = = "1");
//BOOL
            m CervSoft;
//dlg.m CervSoft = (m pSet->m CERVICAL CONSISTANCY SOFT = = "1");
            m_Corticosteroids;
//BOOL
//dlg.m_Corticosteroids = (m_pSet->m_CORTICOSTERIODS= = "1");
//BOOL
            m Dilitation 1 2:
//dlg.m Dilitation = (m pSet->m DILATION 1 2 = = "1");
            m_Dilitation2;
//BOOL
//dlq.m Dilitation2 = (m pSet->m DILATION 2 = = "1");
            m_Dilitation2_3;
//BOOL
//dlg.m Dilitation2 3 = (m pSet->m DILATION 2 3 = = "1");
//BOOL
            m_Dilitation3;
//dlg.m_Dilitation3 = (m_pSet->m_DILATION_3 = = "1");
//BOOL m_DilitationGt3.
            m DilitationGt3;
//dlg.m DilitationGt3 = (m pSet->m DILATION GT3 = = "1");
//BOOL
            m_Dilitation1;
//dlg.m_Dilitation1 = (m pSet->m_DILATION_1 = = "1");
//BOOL m_DilitationLt1;
//dlg.m DilitationLt1 = (m pSet->m DILATION LT1 = = "1");
//BOOL
            m DilitationUkn;
//dlg.m_DilitationUkn = (m_pSet->m_DILATION_UNKNOWN = = "1");
//CString m, EGAatSample;
dlg.m,_EGAatSample = m_pSet->m-EGA-AT-SAMPLING;
//CString m,_EGAbyLMP;
dlg.m,_EGAbyLMP = m,_pSet->m_EGA_BY_LMP;
//Cstring m, EGAbySONO;
dlg.m, EGAbySONO = m, pset->m_EGA_BY_SONO;
            m EthnicOriginAsian;
dlg.m,_EthnicOriginAsian = m,_pSet->m_ETHNIC_ORIGIN_ASIAN = =; "1");
//BOOL
            m EthnicOriginBlack;
dlg.m,_EthnicOriginBlack = m,_pSet->m_ETHNIC_ORIGIN_BLACK = =; "1");
            m EthnicOriginHispanic;
dlg.m,_EthnicOriginHispanic = m,_pSet->m_ETHNIC_ORIGIN_HISPANIC = =; "1");
            m EthnicNativeAmerican;
//BOOL
dlg.m, EthnicOriginNativeAmerican = m, pSet->m_ETHNIC_ORIGIN_NATIVEAMERICAN = =; "I");
```

```
//BOOL
           m EthnicNativeOther:
dlg.m, EthnicOriginNativeOther = m, pSet->m ETHNIC ORIGIN OTHER= =; "1");
           m EthnicNativeWhite;
dlg.m,_EthnicOriginNativeWhite = m,_pSet->m_ETHNIC_ORIGIN_WHITE= =; "1");
//BOOL
           m_FFN_Neg;
dlg.m,_FFN_Neg = m,_pSet->m_FFN_RESULT= =; "0");
//BOOL
           m FFN Pos;
dlg.m,_FFN_Pos = m,_pSet->m_FFN RESULT= =; "1");
//BOOL
           m GestationDiabetes;
dlg.m,_GestationDiabetes = m,_pSet->m GESTATIONAL DIABETES = =; "1");
//BOOL
           m_HypertensiveDisorders;
dlg.m,_HypertensiveDisorders = m,_pSet->m_HYPERTENSIVE_DISORDERS = =; "1");
//BOOL
           m Insulin;
      _Insulin = m, _pSet->m_INSULIN = =; "1");
dlg.m,
//Cstring m_LadID,
dlg.m, _ MultipleGestationQuads = m, _pSet->m_ MULTIPLE_GESTATION QUADS = =;
"1");
//BOOL
           m_MultipleGestationTriplets;
dlg.m, Mul
= =; "1");
       MultipleGestationTriplets = m,_pSet->m_ MULTIPLE GESTATION TRIPLETS
//BOOL
           m MultipleGestationTwins;
dlg.m,_ MultipleGestationTwins = m,_pSet->m_ MULTIPLE_GESTATION_TWINS = =;
"1");
//BOOL
           m MaritalStatusDivorced;
dlg.m, _ MaritalStatusDivorced = m, _pSet->m_ MARITIAL_STATUS_DIVORCED = =;
"1");
//BOOL
           m MaritalStatusLWP;
dlg.m, MaritalStatusLWP = m, pSet->m MARITIAL_STATUS_LWP = =; "1");
//BOOL
           m MaritalStatusMarried;
dlg.m, MaritalStatusMarried = m, pSet->m MARITIAL_STATUS_MARRIED = =;
"1"):
//BOOL
           m MaritalStatusOther;
dlg.m, _ MaritalStatusOther = m, _pSet->m_ MARITIAL_STATUS OTHER = =; "1");
           m MaritalStatusSingle;
//BOOL
dlg.m,_ MaritalStatusSingle = m,_pSet->m_ MARITIAL_STATUS_SINGLE = =; "1");
//BOOL
           m MaritalStatusWidowed;
dlg.m, MaritalStatusWidowed = m, pSet->m MARITIAL STATUS WIDOWED = =;
"1");
//BOOL
           m MultipleGestation;
m PatientCompl;
dlg.m, PatientComp1 = m, pSet->m PATIENT_COMPLAINT_1= =; "1");
//BOOL m PatientComp2;
dlg.m, PatientComp2 = m, pSet->m PATIENT_COMPLAINT_2= =; "1");
//BOOL m PatientComp3:
           m PatientComp3;
dlg.m,_ PatientComp3 = m,_pSet->m_ PATIENT_COMPLAINT_3= =; "1");
//BOOL
           m_PatientComp4;
dlg.m, PatientComp4 = m, DSet->m PATIENT_COMPLAINT_4= =; "1");
//BOOL m PatientComp5:
           m_PatientComp5;
dlg.m, PatientComp5 = m, pSet->m PATIENT_COMPLAINT_5= =; "1");
//BOOL m PatientComp6;
dlg.m, PatientComp6 = m, pSet->m PATIENT_COMPLAINT_6= =; "1");
//BOOL m PatientComp6:
//BOOL m_PatientComp6;
dlg.m, PatientComp6 = m, pSet->m_ PATIENT_COMPLAINT_6= =; "1");
//BOOL m_Tocolytics;
```

```
dlg.m,_Tocolytics = (m-pSet->m_TOYOLYTICS
//BOOL
            m UtCervAbnormal,
dlg.m,_UtCerUAbnormal = (m-pSet->m_UTCERV_ABNORMALITY = = . "1");
//BOOL
            m VaginalBleeding;
dlg.m_VaginalBleeding - (m_pSet->m - VAGINAL_BLEEDING "1");
//BOOL
           m VaginalBleedingGross;
dlg.m. VaginalBleedingGross = (m pSet->m-VAGINAL BLEEDING GROSS
           m VaginalBleedingMed;
dlg.m VaginalBleedingMed = (m pSet->m VAGINAL BLEEDING MEDIUM
//BOOL
            m VaginalBleedingTrace;
dlg.m, VaginalBleedingTrace = (m_pSet->m_VAGINAL_BLEEDING_TRACE
//BOOL m2_COMP_2;

//dlg.m2_COMP_2 = "1");

//sooL m2_COMP_3 = (m_pSet->m2_COMP_2 = "1");

//sooL m2_COMP_3 = (m_pSet->m2_COMP_3 = "1");
//CString m ABORTIONS;
      dlg.m_ABORTIONS = m_pSet->m_ABORTIONS;
      //CString m GRAVITY;
      dlg.m GRAVITY = m_pSet->m_GRAVITY;
      //CString m PARITY;
      dlg.m PARITY = m PSet->m PARITY;
      //BOOL m_PatComp1_1_3;
dlg.m_PatComp1_1_3 = (m_pSet->m_PATIENT_COMPLAINT_1_1_3 == "1");
//BOOL m_PatComp1_10_12,
dlg.m_PatComp1_10_12 = (m_pSet->m_PATIENT_COMPLAINT_1_10_12 == "1");
                  m PatCompl 4 6;
      //BOOL
      dlg.m PatComp1 7 9 = (m pSet->m PATIENT COMPLAINT 1 7 9 = = "1");
                  m PatComp1 GT12;
      //BOOL
      dlg.m PatCompl LT1 = (m pSet->m PATIENT COMPLAINT 1 LT1 = = "1");
      if(dlq.DoModal() = = IDOK) {
            //dlg.m DATE OF DATA ENTRY = m pSet->m DATE OF DATA ENTRY;
            //dlq.m PATIENT AGE = m pSet->m PATIENT AGE;
            //CString m_DATE_OF_BIRTH;
            m pSet->m DATE OF
            m pSet->m DATE OF BIRTH = dlg.m_DATE_OF_BIRTH;
//CString m_NAME_F;
            m pSet->m NAME F = dlg.m NAME F;
            //CString m_NAME_L;
            m pSet->m_NAME_L = dlg.m_NAME_L;
//CString m_NAME_MI;
            m_pSet->m_NAME_MI = dlg.m_NAME_MI;
                        m_1_COMP;
            //BOOL
            m_pSet->m_1-COMP = (dlg.m_1_COMP?"1":"0");
            /7B00L
                        m 2 COMP;
            m_pSet->m_2_COMP = (dlg.m_2_COMP?"1":"0");
                        m 3 COMP:
            /7B001
            m_pSet->m_3_COMP = (dlg.m_3_COMP?"1":"0");
            m_pSet->m_5_COMP = (dlg. m_5_COMP?"1":0")
            //BOOL m_6_comp;
m_pSet->m_6_COMP = (dlg. m_6_COMP?"1":"0");
            /TBOOL
                        m ACOG N;
```

```
m_pSet->m_ACOG_SYNPTOMS = (dlg.m_ACOG-N?"0":" ");
            /7BOOL
                        m ACOG Y;
            m pSet->m ACOG SYNPTOMS =
(dlg.m ACOG Y?"1":m pSet->m ACOG SYNPTOMS);
            //BOOL
                        m Antibiotics:
           m pSet->m ARTIBIOTICS = (dlq.m-Antibiotics?"1":"0");
            /7BOOL
                        m_AntiHyper;
           m_PSet->m_ANTIHYPERTENSIVES = (dlg.m_AntiHyper?"1":"0");
            /7BOOL
                        m CervCerclage;
           m pSet->m CIRVICAL CERCLAGE = (dlg.m CervCerclage?"1":"0"):
            /7BOOL
                        m CervFirm;
           m pSet->m CERVICAL CONSISTANCY FIRM = (dlg.m CervFirm?"1":"0");
            //BOOL
                        m CervMod;
           m_pSet->m_CERVICAL_CONSISTANCY_MOD = (dlg.m_CervMod?"1":"0");
            //BOOL
                        m CervSoft;
           m pSet->m CERVICAL CONSISTANCY SOFT = (dlg.m CervSoft?"1":"0");
                        m Corticosteroids;
            /7BOOL
           m pSet->m CORTICOSTEROIDS = (dlg.m Corticosteroids?"1":"0");
           /\bar{BOOL} m_Dilitation1_2;
m_pSet->m_DILITATION_1_2 = (dlg.m_Dilitation1_2?"1":"0");
            /7BOOL
                        m Dilitation2;
           m pSet->m DILITATION 2 = (dlg.m Dilitation2?"1":"0");
                        m Dilitation2-3;
            //BOOL
           m pSet->m DILITATION 2 3 = (dlg.m Dilitation2 3?"1":"0");
            /7BOOL
                        m_Dilitation3;
           m pSet->m DILITATION 3 = (dlg.m Dilitation3?"1":"0");
            /7BOOL
                        m DilitationGt3;
           m pSet->m DILITATION 1 = (dlg.m Dilitation1?"1":"0");
            /7BOOL
                        m DilitationLt1:
           m_pSet->m_DILITATION_LT1 = (dlg.m_DilitationLt1?"1":"0");
            /7BOOL
                        m DilitationUkn;
            m pSet->m DILITATION UNKNOWN = (dlq.m DilitationUkn?"1":"0");
            /7Cstring m EGAatSample;
           m_pSet - >m_EGA_AT_SAMPLING = dlg. m_EGAatSample;
            //CString m_EGAbyLMP;
            m pSet->m EGA BY LMP = dlg.m EGAbyLMP;
            //Cstring m EGAbySONO;
            m_pSet->m_EGA_BY_SONO = dlg.m_EGAbySONO;
            /7BOOL
                        m_EthnicOriginAsian;
m_pSet->m_EYHNIC_ORIGIN_ASIAN =
(dlg.m_EthnicOriginAsian?"1":"0");
            //BOOL
                        m EthnicOriginBlack;
           m_pSet->m_ETHNIC_ORIGIN_BLACK =
(dlg.m EthnicOriginBlack?"1":"0");
            //BOOL
                        m_EthnicOriginHispanic;
            m pSet->m ETHNIC ORIGIN HISPANIC =
(dlg.m_EthnicOriginHispanic?"1":"0");
            //BOOL
                        m EthnicOriginNativeAmerican;
m_pSet- >m ETHNIC ORIGIN NATIVE AMERICAN =
(dlg.m_EthnicOriginNativeAmerican?"1":"0")
            //BOOL
                        m EthnicOriginOther;
           m pSet->m ETHNIC ORIGIN OTHER =
(dlg.m_EthnicOriginOther?"1":"0");
            //BOOL
                        m EthnicOriginWhite;
            m pSet->m ETHNIC ORIGIN WHITE =
(dlg.m_EthnicOriginWhite?"1":"0")
                        m FFN_Neg;
            //BOOL
           m pSet->mFFN RESULT = (dlg.m FFN Neg?"0":" ");
                        m FFN Pos;
```

```
m pSet->m FFN RESULT =
(dlg.m FFN Pos?"1":m_pSet->m_FFN_RESULT);
            //BOOL
                         m GestationalDiabetes;
            m pSet->m GESTATIONAL DIABETES =
(dlg.m_GestationalDiabetes?"1":"0");
            //BOOL
                         m_HypertensiveDisorders;
            m pSet->m HYPERTENSIVE DISORDERS =
(dlg.m HypertensiveDisorders?"1":"0");
            //BOOL
                         m Insulin;
            m_pSet->m_INSULIN = (dlg.m_Insulin? "1":"0")
            //cstring m_LadID;
            m pSet->m LAB ID = dlg.m LadID;
                         m MedicationNone:
            m pSet->m MEDICATIONS NONE = (dlg.m MedicationNone?"1":"0");
            /7BOOL
                         m MedicationUnknown;
            m pSet->m MEDICATIONS UNKNOWN =
(dlg.m_MedicationUnknown?"1":"0");
            //BOOL
                         m MultipleGestationQuads;
m pSet->m MULTIPLE GESTATION_QUADS =
(dlg.m MultipleGestationQuads?"1":"0");
                         m MultipleGestationTriplets;
             //BOOL
            m pSet->m MULTIPLE GESTATION TRIPLETS =
(dlg.m_MultipleGestationTriplets?"1":"0");
            //BOOL
                         m MultipleGestationTwins;
            m pSet->m MULTIPLE GESTATION TWINS =
(dlg.m_MultipleGestationTwins?"1":"0");
            7/BOOL
                         m MaritalStatusDivorced;
m pset->m MARTTAL STATUS DIVORCED =
(dlg.m_MaritalStatusDivorced?"1":"0");
             //BOOL
                         m MaritalStatusLWP;
            m pSet->m MARITAL STATUS LWP -
(dlg.m_MaritalStatusLWP?"1":"0");
            //BOOL
                         m MaritalStatusMarried;
m_pset->m_MARITAL_STATUS_MARRIED =
(dlg.m_MaritalStatusMarried?"\bar{\text{1}}":"0");
            //BOOL
                         m_MaritalStatusOther;
            m pSet->m MARTTAL STATUS OTHER - (dlq.m MaritalStatusOther?"1":
"0");
            //BOOL
                         m MaritalStatusSingle;
            m pSet->m MARITAL STATUS SINGLE =
(dlg.m_MaritalStatusSingle?"1":"0");
                         m MaritalStatusWidowed;
             //BOOL
m pset->m_MARTTAL STATUS_WIDOWED =
(dlg.m_MaritalStatusWidowed?"1":"0");
             //BOOL
                         m MultipleGestation;
            m pSet->m MULTIPLE GESTATION = (dlg
m MultipleGestation?"1":"0");
            //BOOL
                         m PatientCompl:
            m pSet->m_PATIENT_COMPLAINT_1 = (dlg.m_PatientCompl?"1":"0");
             /7BOOL
                         m PatientComp2;
               pSet->m PATIENT COMPLAINT 2 = (dlg.m PatientComp2?"1":"0");
            /7BOOL
                         m PatlentComp3;
            m_pSet->m_PATIENT_COMPLAINT_3 = (dlg.m_PatientComp3?"1":"0");
             /7BOOL
                         m PatientComp4;
            m_pSet->m_PATIENT_COMPLAINT_4 = (dlg.m_PatientComp4?"1":"0");
             //BOOL
                         m PatlentComp5;
            m_pSet->m_PATIENT_COMPLAINT_5 = (dlg.m_PatientComp5?"1":"0");
             /7BOOL
                         m PatientComp6;
            m_pSet->m_PATTENT_COMPLAINT_6 = (dlg.m_PatientComp6?"1":"0");
             /7BOOL
                         m Tocolytics;
            m pSet->m TOYOLYTICS = (dlg.m Tocolytics?"1":"0");
```

```
//BOOL
                             m UtCervAbnormal:
              m pSet->m UTCERV ABNORMALITY = (dlg.m_UtCervAbnormal?"1":"0");
              /7BOOL
                             m VaginalBleeding;
              m_pSet->m_VAGINAL_BLEEDING = (dlg.m_VaginalBleeding?"1":"0");
              /TBOOL
                            m_VaginalBleedingGross;
m pSet->m_VAGINAL BLEEDING_GROSS =
(dlg.m_VaginalBleedingGross?"I":"0")
              //BOOL
                            m_VaginalBleedingMed;
              m pSet->m VAGINAL BLEEDING MEDIUM =
(dlg.m_VaginalBleedingMed?"1":"0");
//BOOL m_VaginalBleedingTrace;
m._pset->m_VAGINAL_BLEEDING_TRACE =
(dlg.m_VaginalBleedingTrace?"1":"0");
              //BOOL m_2 COMP_1;
m_pSet->m_2 COMP_1 = (dlg, m_2_COMP_1?"1":"0");
//BOOL m_2 COMP_2;
m_pSet->m_2COMP_2 = (dlg, m_2_COMP_2?"1":"0");
              //Bool m_2_COMP_3;
m_pSet->m_2_COMP_3 = (dlg. m_2_COMP_3?"1":"0");
              //CString m ABORTIONS;
              m pset->m_ABORTIONS = dlg.m_ABORTIONS;
//Cstring m_GRAVITY;
              m_pSet->m_GRAVITY = dlg.m GRAVITY;
              val = atoi(m_pSet->m_GRAVITY);
if(val == 0) {
              _____, m_pSet->m_0_COMP = "1"; } else {
                     m pSet->m 0 COMP = "0";
              //CString m_PARITY;
              M_pSet->m_PARITY = dlg.m_PARITY;
                            m PatComp1 1 3;
              //BOOL
              m_pSet->m_PATTENT_COMPLAINT_1_1_3 =
(dlg.m_PatComp1_1_3?"1":"0");
//BOOL m Pat
                            m_PatComp1_10_12;
              m pSet->m PATIENT COMPLAINT 1 10 12 =
(dlg.m_PatComp1_10_12?"1":"0");
              //BOOL m PatCompl 4 6;
m pset->m PATTENT_COMPLATNT_1_4_6 =
(dlg.m_PatComp1_4_6?"1":"0");
//BOOL m Pat
                            m_PatCompl_7_9;
              m_pSet->m_PATIENT_COMPLAINT_1_7_9 =
(dlg.m PatComp1 7 9?"1":"0");
              //BOOL
                            m PatComp1_GT12;
              m_pSet->m_PATIENT_COMPLAINT_1_GT12 =
(dlg.m_PatComp1_GT12?"1":"0");
              //BOOL
                             m PatCompl LT1;
              m pSet->m PATIENT COMPLAINT 1 LT1 =
(dlg.m PatCompl LT1?"1":"0");
              // generate the net fields
              m_pSet->RunNets(m_pSet->CurRecord);
              // write the record to the file
              m pSet->put rec(m pSet->Rec);
       }
int CPTDinpView::str2int( CString& str )
```

```
if(str = = "0") return 2;
      if(str = = "1") return 1;
      if(str = = "2") return 0;
     return -1:
char* CPTDinpView::int2str( int val )
      if(val = = 0) return "2";
      if (val = = 1) return "1";
     if (val = = 2) return "0";
     return " ";
int CPTDinpView::yn2int( CString& str )
      if(str = = "0") return 1;
     if(str = = "1") return 0;
     return -1;
char* CPTDinpView::int2yn( int val )
      if(val = = 0) return "1";
     if(val = = 1) return "0";
return " ":
}
void CPTDinpView::OnDataEdit()
     CPTDinpDoc*pDoc = GetDocument();
      FILE *fp;
      fp = fopen(pDoc->PathName, "rb");
      if (fp!=NULL) {
           fclose(fp);
      Dlg.m ofn.1pstrTitle = "Open Fixed length DataBase file";
if( Dlg.DoModal() == IDOK ) {
                  strcpy (pDoc->PathName, Dlg. GetPathName ());
                  fp = fopen(pDoc->PathName, "rb");
                  if(fp= =NULL) {
                       AfxMessageBox("Unable to open Database File!");
                       return;
                 pDoc->CurRecord = 0;
                  fseek(fp,OL,SEEK_END);
                  pDoc->NumRecords = ftell(fp) / (REC LENGTH+2L);
                  fclose(fp);
     Edit();
void CPTDinpView::OnDataNew()
```

```
FILE *fp:
     CPTDinpDoc* pDoc = GetDocument();
     create a new record
           fp = fopen(pDoc->PathName, "ab");
           if (fp!=NULL)
                fwrite (pDoc->Rec, sizeof (char), (REC LENGTH + 2L), fp)
                fclose(fp);
           pDoc->InitializeRec();
           pDoc->NumRecords += 1;
           pDoc->CurRecord = pDoc->NumRecords - 1;
           pDoc->put_rec(pDoc->Rec);
     // edit the new record
           pDoc->get_rec(pDoc->Rec);
Edit();
   PTDIVW.h : interface of the CPTDinpView class
class CPTDinpView : public CView
protected: // create from serialization only
     CPTDinpView();
     DECLARE DYNCRF.ATE(CPTDinpView)
//Attributes
public:
     CPTDinpDoc* GetDocument ( ):
     BOOL ShowPrt;
     CPTDinpDoc* m pSet;
     void Edit ( void );
// Operations
public:
     // conversions for dialogs
     int str2int( CString& str );
     char* int2str( int val );
     int yn2int( CString& str );
char* int2yn( int val );
// Implementation
public:
     virtual -CPTDinpView();
     virtual void OnDraw(CDC* PDC); // overridden to draw this view
#ifdef DEBUG
     viriual void AssertValid() const:
     virtual void Dump(CDumpContext& dc) const;
#endif
protected:
     // Printing support
virtual BOOL OnPreparePrinting(CPrintlnfo* pInfo);
     virtual void OnBeginPrinting(CDC* pDC, CPrintInfo* pInfo);
```

```
virtual void OnEndPrinting(CDC* pDC, CPrintInfo* pInfo);
// Generated message map functions
protected:
     //{{AFX_MSG(CPTDinpView)
     afx_msg void OnDataEdit ();
afx_msg void OnDataNew ();
//}}AFX_MSG
     DECLARE MESSAGE MAP ( )
};
#ifndef DEBUG // debug version in PTDivw.cpp
inline CPTDinpDoc* CPTDinpView: : GetDocument ( )
       return (CPTDinpDoc*)m_pDocument;
#endif
// stdafx.cpp : source file that includes just the standard includes
// stdafx.pch will be the pre-compiled header
// stdafx.obj will contain the pre-compiled type information
#include "stdafx.h"
// stdafx.h : include file for standard system include files,
   or project specific include files that are used frequently, but
     are changed infrequently
#include <afxwin.h>
                      // MFC core and standard components
#include <afxext.h>
                            // MFC extensions (including VB)
// MFC database classes
#include <afxdb.h>
   ENDOINP.RC2 - resources App Studio does not edit directly
#ifdef APSTUDIO INVOKED
     #error this file is not editable by App Studio
#endif //APSTUDIO INVOKED
// Version stamp for this .EXE
#include "ver.h"
VS VERSION INFO
                      VERSIONINFO
     FILEVERSION
                      1,0,0,1
     PRODUCTVERSION
                      1,0,0,1
     FILEFLAGSMASK
                            VS FFI FILEFLAGSMASK
     #ifdef DEBUG
     FILEETAGS
VS FF DEBUG | VS_FF_PRIVATEBUILD | VS FF PRERELEASE
     FILEFLAGS
                           0 // final version
#endif
```

```
FILEOS
                             VOS DOS WINDOWS16
     FILETYPE
                             VFT APP
                         // not used
     FILESUBTYPE
BEGIN
     BLOCK "StringFileInfo"
     BEGIN
     BLOCK "040904E4" // Lang=US English, CharSet=Windows Multilingual
     BEGIN
           VALUE "CompanyName",
                                         "\0"
           VALUE "FileDescription",
                                               "ENDOINP MFC Application\0"
                                         "1.0.001\0",
           VALUE "FileVersion",
           VALUE "InternalName",
                                         "ENDOINP\0"
           VALUE "LegalCopyright",
                                         "\0"
           VALUE "LegalTrademarks",
                                         "\0"
           VALUE "OriginalFilename",
                                         "ENDOINP.EXE\0"
                                         "ENDOINP\0"
           VALUE "ProductName",
           VALUE "ProductVersion",
                                         111.0.001\01,
     END
END
BLOCK "VarFileInfo"
BEGIN
     VALUE "Translation", 0x409, 1252
           // English language (0x409) and the Windows ANSI codepage
(1252)
     END
END
// Add additional manually edited resources here...
//{{NO DEPENDENCIES}}
App Studio generated include file.
//Used by PTDINP.RC
#define APS 3D CONTROLS
#define YDD_TBOUTBOX
#define IDD_ENDOIN_FORM
#define IDD_ENDO_PG01
                                   100
                                   101
                                   102
#define IDD ENDO PG02
                                   103
#define IDD_ENDO_PG03
                                   104
#define IDD ENDO PG04
#define IDD ENDO PG05
                                   105
                                   106
#define IDD ENDO PGO6
                                   107
#define IDD ENDO PG07
                                   108
#define IDD_ENDO_PGOS
#define IDD_ENDO_PGO9
#define IDD_ENDO_PG10
                                   109
                                   110
                                   111
#define IDD ENDO PG11
                                   112
#define IDD_ENDO_PG12
                                   113
#define IDD_ENDO_PG13
#define IDD ENDO PG14
                                   114
                                   115
#define IDD ENDO SP04A
                                   116
#define IDD_ENDO_SP04B
                                   117
#define IDD_ENDO_SP07A
#define IDD_ENDO_SP08A
                                   118
                                   119
#define IDD ENDO SP08B
                                   120
```

#define	IDR MAINFRAME	128
#define	IDR ENDOINTYPE	129
#define	IDP FAILED OPEN DATABASE	130
#define	IDD_ENDO_S908C	131
#define	IDD_ENDO_PG15	132
#define	IDD_ENDO_SP10A	133
#define	IDD_ENDO_SP08D	134
#define	IDD_ENDO_SP09A	135
#define	IDD_ENDO_SP08E	136
#define #define	IDD_ENDO_PGO IDD_ENDO_PG77	137 138
#define	IDD D PT5 INP	139
#define	IDD D GOT5	140
#define	IDB_BITMAP1	141
#define	IDC E DATE	1000
#define	IDC E ADEZA ID	1001
#define	IDC E INST ID	1002
#define	IDC_E_AGE_MENS2	1002
#define	IDC_E_ADEZA_ID2	1002
#define	IDC_E_TOTAL_POINTS	1002
#define	IDC_E_PAT_BIRTHDATE	1003
#define #define	IDC_E_PAT_ZIPCODE IDC_E_PAT_OCCUPATION	1004
#define	IDC C PAT WHITE	1005 1006
#define	IDC C PAT BLACK	1005
#define	IDC C PAT HISPANIC	1008
#define	IDC C PAT ASIAN	1009
#define	IDC C PAT OTHER	1010
#define	IDC C PAT HIGHSCHOOL	1011
#define	IDC C PAT COLLEGE	1012
#define	IDC_C_PAT_GRADUATE	1013
#define	IDC_C_PAT_POSTGRAD	1014
#define	IDC_C_MARRIED	1015
#define	IDC_B_GOBACK	1016
#define #define	IDC C SP WHITE IDC C SP BLACK	1017
#define	IDC C SP HISPANIC	1018 1019
#define	IDC C SP ASIAN	1020
#define	IDC C SP OTHER	1021
#define	IDC C SP HIGHSCHOOL	1022
#define	IDC C SP COLLEGE	1023
#define	IDC_C_SP_GRADUATE	1024
#define	IDC_C_SP_POSTGRAD	1025
#define	IDC_E_SP_OCCUPATION	1026
#define	IDC_E_PAT_AGE	1027
#define	IDC_C_PAT_FLAG IDC_R_DIAB_MELL1	1028
#define	IDC R DIAB MELL1 IDC R DIAB MELL2	1029 1030
#define	IDC R DIM MELL3	1030
#define	IDC B PREV PG	1032
#define	IDC R OTHER STD1	1033
#define	IDC R OTHER STD2	1034
#define	IDC_R_PI_DIAB1	1035
#define	IDC_R_PI_DIAB2	1036
#define	IDC_R_PI_DIAB3	1037
#define	IDC_R_OTHER_STD3	1038
#define	IDC_R_VAG_IRF1	1039
#define #define	IDC_R_VAG_INF2 IDC R_VAG_INF3	1040
#define	IDC_R_VAG_INF3 IDC_R_GEN_WARTS1	1041 1042
#define	IDC R-GEN-WARTS1	1042
,,		1043

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#define	IDC R ECTOPIC PREG3	1081
#define	IDC ABDOM PAIN2	1082
#define	IDC R MENS ABNORMI	1083
#define	IDC R MENS ABNORM2	1084
#define	IDC R DYSMEN1	1085
#define	IDC R DYSMEN2	1086
#define	IDC R DISPAR1	1087
#define	IDC R DISPAR2	1088
#define	IDC R INFERTILITY1	1089
#define	IDC R INFERTILITY2	1099
#define	IDC R ADN MAS THICK1	1091
#define	IDC R ADN MAS THICKS	1092
#define	IDC R OVARIAN CYST1	1092
#define	IDC R OVARIAN CYST2	1094
#define	IDC R UNDETERMINED1	1094
#define	IDC E CUR SYM OTHER	1096
#define	IDC R MENST REG1	1098
#define	IDC R MENST REGI	1097
#define	IDC E LAST PERIOD	
#define	IDC E RECENT PART	1099
		1100
#define		1101
#define	IDC_E_PARITY	1102
#define	IDC_R_HX_INFERT1	1103
#define	IDC_R_HX_INFERT2	1104
#define	IDC_R_OV_STAT_KNOWN1	1105
#define	IDC_R_OV_STAT_KNOWN2	1106
#define	IDC_E_SPONT_ABORT	1107
#define	IDC_R_MENS_FLOW1	1107
#define	IDC_E_ELECT_ABORT	1108
#define	IDC_R_MENS_FLOW2	1108
#define	IDC_R_MENS_FLOW3	1109
#define	IDC_R_HX_OF_END01	1110
#define	IDC_R_HX_OF_END=	1111
#define	IDC_R_HX_PEL_SURG1	1112
#define	IDC_R_HX_PEL_SURG2	1113
#define	IDC_R_HORMON_MED1	1114
#define	IDC_R_HORMONE_MED2	1115
#define	IDC_E_CUR_SURG_DATE	1116
#define	IDC_E CUR SURG REASON2	1117
#define	IDC_C_DIAG_LA_PAR	1118
#define	IDC_CLASER_OBLIT	1119
#define	IDC C SURG EXCISION	1120
#define	IDC_C_BI_SAL_OOPH	1121
#define	IDC_C_UNIL_OOPH	1122
#define	IDC C EXC OV CYST	1123
#define	IDC_C_OLULA	1124
#define	IDC_C_HYSTERECTOMY	1125
#define	IDC C HYSTEROSCOPY	1126
#define	IDC C D AND C	1127
#define	IDC C CUR SURG OTHER	1128
#define	IDC C NORM PEL	1129
#define	IDC_ENDO_PRESENT	1130
#define	IDC_C_ADHESIONS PRES	1131
#define	IDC C FIBROIDS TRES	1132
#define	IDC C PELV INF DISEASE	1133
#define	IDC C GYN CANCER	1134
#define	IDC C OTHER GYN DIS	1135
#define	IDC R AFS STG1	1136
#define	IDC R-AFS STG2	1137
#define	IDC R AFS STG3	1138
#define	IDC R AFS STG4	1139
		==55

#define	IDC C BLUE BK LESIONS	1141
#define	IDC C RED LESIONS	1142
#define		1143
#define		1144
#define		
		1145
#define		1146
#define		1147
#define		1148
#define		1149
#define	IDC C FALLOP EST	1150
#define	IDC C FALLOP ADH	1151
#define	IDC C UT LIG EST	1152
#define	IDC C UT LIG ADH	1153
#define	IDC C CULDESAC EST	1154
#define	IDC C CULDESAC ADH	1155
#define	IDC C BROAD LIG EST	1156
#define	IDC C BROAD LIG ADH	1157
#define		1158
#define	IDC C PEL SIDE ADH	1159
#define	IDC C VESIC EST	1160
#define		1161
#define	IDC_C_OTHER_EST	1162
#define		1163
#define	IDC_E_PID_DATE	1164
#define	IDC_R_HAVE_PID1	1165
#define	IDC_E_PID_LOC_SPECIFY	1165
#define	IDC_E_ADDL_PID	1165
#define	IDC R HAVE PID2	1166
#define	IDC E PID LOC SPECIFY2	1166
#define	IDC C PID C LAPS	1167
#define	IDC C PID C LAPT	1168
#define		1169
#define		1170
#define	IDC E PID A SPECIFY	1171
#define	IDC R PID CONF SURG1	1172
#define	IDC R GC HISTOLOGY1	1172
#define	IDC R P15 CONF SURG2	1173
#define		1173
#define	IDC C PID M ORG UNKNOWN	1174
#define		1175
#define		
		1176
#define		1177
#define		1178
#define		1179
#define		1180
#define		1181
#define		1182
#define		1183
#define	IDC E PID ORG SPECIFY	1184
#define	IDC_R_GC PRIMARY	1185
Nefine 1	IDC_R_GC_PRIMARY2	1186
	DC_R_GC_PRIMARY3	1187
#define		1188
#define	IDC_R GC GRADEI	1189
	IDC R GC STAGE2	1190
Kefine 1	DC_R_GC_STAGE3	1191
Nefine :	IDC R GC STAGE4	1192
#define		1193
#define	IDC R GC GRADE2	1194
#define	IDC R GC GRADE3	1195
#define	IDC_R_GC_STAGE1	1196
,,		1170

#define #defin	IDC E GC ADD INFO IDC E-PKS PER DAY IDC E OTHER STD SPECIFY IDC-E - PRES-MED DRUG1 IDC-E - PRES-MED DRUG1 IDC E PRES MED DRUG2 IDC E PRES MED DRUG2 IDC E OTHER HX SPECIFY IDC E PRES MED DATE1 IDC E PRES MED DATE2 IDC C INFERT PRI IDC E PRES MED DATE2 IDC C INFERT SEC IDC C HOR MED I IDC E PRI MARY LEN IDC E HOR MED I IDC E HOR MED DOSE1 IDC E HOR MED DATE1 IDC E HOR MED DATE1 IDC E FEL SURG TYPE1 IDC E HOR MED DATE1 IDC E HOR MED DATE2 IDC E PEL SURG DATE2 IDC E HOR MED DOSE2 IDC E FEL SURG DATE2 IDC E HOR MED DOSE2 IDC E FEL SURG TYPE2 IDC E OVUL STAT1 IDC E HOR MED DATE2 IDC E PEL SURG TYPE2 IDC E PEL SURG TYPE2 IDC E PEL SURG TYPE3 IDC E PEL SURG DATE3 IDC E FEL SURG DATE3 IDC E FOR MED DURP3 IDC E FOR MED DATE3 IDC E HOR MED DURP3 IDC E HOR MED DURP3 IDC E HOR MED PURP3	1197 1198 1199 1200 1201	1202 1203 1204 1205 1205 1205 1206 1207 1208 1208 1210 1211 1211 1212 1212 1212
#define #define #define #define	IDC_C_HOR_MED IDC_E_PEL_SURG_DATE4	1215 1215 1215	1214
#define #define	IDC_E_HOR_MED_DOSE3 IDC E PEL SURG TYPE4	1216 1216	
#define	IDC_C_MENST_HORM_INDUCED	1216	
#define	IDC E HOR MED DATE3	1217	
#define	IDC E TYP CYC LEN	1217	
#define	IDC E HOR MED PURP3	1218	
#define	IDC E TYP PERIOD LEN	1218	
#define	IDC C HOR MED4	1219	
#define	IDC E FREQUENCY	1219	
#define	IDC E HOR MED DOSE4	1220	
#define	IDC E OTH SURG PROC SPECIFY	1220	
#define	IDC E HOR MED DATE4	1221	
#define	IDC_E_OTHER_GYN_SPECIFY	1221	
#define	IDC_E_HOR_MED_PURP4	1222	
#define	IDC_CONFIRMED_BY_LAPAROSCOPY		1222
#define	IDC_C_CONFIRMED_BY_LAPAROTON		1223
#define	IDC_CONFIRMED_BY_BIOPSY	1224	
#define	IDC_E_LAPAROSCOPY_DATE	1225	
#define	IDC_E_LAPAROTOMY_DATE 1226		
#define	IDC_E_BIOPSY_DATE	1227	
#define	IDC_E_RECORD_COUNT	1230	
#define	IDC_R_HORMONE_INDUCED	1232	
#define		1233	
#define		1247	
#define	IDC_EO_BLACK	1248	
#define	IDC_EO_ASIAN	1249	

#define	IDC EO HISPANIC	1250
#define	IDC EO NATIVE AMERICAN	1251
#define	IDC EO OTHER	1252
#define	IDC MS MARRIED	1253
#define	IDC MS SINGLE	1254
#define	IDC MS WIDOWED	1255
#define	IDC MS LWP	1256
#define	IDC MS OTHER	1257
#define	IDC ACOG Y	1258
#define	IDC ACOG N	1259
#define	IDC MS DIVORCED	1260
#define	IDC ANTIBIOTICS	1261
#define	IDC FFN POS	1262
#define	IDC CORTICOSTEROIDS	1263
#define	IDC TOCOLYTICS	1264
#define	IDC INSULIN	1265
#define	IDC ANTIHYPER .	1266
#define	IDC FFN NEG	1267
#define	IDC MED NONE	1268
#define	IDC MED UKN	1269
#define	IDC PATENT COMP 1	1270
#define	IDC PATIENT COMP 3	1271
#define	IDC PC1 LT1	1272
#define	IDC_PC1_1_3	1273
*define	IDC_PC1_4_6	1274
#define	IDC_PATENT_COMP_2	1275
#define	IDC_VAGINAL_BLEEEING	1276
#define	IDC_VB_TRAC	1277
#define	IDC_VB_MED	1278
#define	IDC_VB_GROSS	1279
#define	IDC_PATIENT_COMP_6	1280
#define	IDC_PATIENT_COMP_5	1281
#define	IDC_PATIENT_COMP_4	1282
#define	IDC_EGA_BY_SONO	1283
#define	IDC_EGA_BY_LMP	1284
#define	IDC_EGA_AT_SAMP	1285
#define	IDC_DILITATION_LT1	1286
#define	IDC_DILITATION_1	1287
#define	IDC_DILITATION_1_2	1288
#define	IDC_DILITATION_2	1289
#define	IDC_DILITATION_2_3	1290
#define #define	IDC_DILITATION_3 IDC_DILITATION_GT3	1291 1292
#define	IDC CERV FIRM	1292
#define	IDC CERV MOD	1293
#define	IDC CERV MOD	1294
#define	IDC 1 CORP	1295
#define	IDC 2 COMP	1299
#define	IDC 3 COMP	1300
#define	IDC 4 COMP	1301
#define	IDC 5 COMP	1302
#define	IDC 6 COMP	1303
#define	IDC MULT GEST	1304
#define	IDC UT CWRV ABNORM	1304
#define	IDC CERV CERCLAGE	1306
#define	IDC GEST DIABETES	1307
#define	IDC_HYPERTEN DISORDERS	1308
#define	IDC MG TWINS	1309
#define	IDC MG TRIPLETS	1310
#define	IDC MG QUADS	1311
#define	IDC NAME L	1313

```
#define IDC NAME F
                                               1314
 #define IDC NAME MI
                                                1315
 #define IDC_DATE_OF_BIRTH
                                               1316
#define IDC_LAB_ID
#define IDC_ILATATION_UKN
#define IDC_GRAVIDITY
#define IDC_PARITY
                                               1317
                                                1318
                                                1319
                                                1320
 #define IDC ABORTIONS
                                               1321
#define IDC_PC1_7_9
#define IDC_PC1_10_12
#define IDC_PC1_GT12
                                               1322
                                               1323
#define IDC_PCI_GTI2
#define IDC_2 CUMP 1
#define IDC_2 COMP 2
#define IDC_2 COMP 3
#define IDC_R GOTO_SEL1
#define IDC_R GOTO_SEL1
#define IDC_R GOTO_SEL NUM
#define IDC_E GOTO_TREC_NUM
#define IDC_E GOTO_TREC_NUM
#define IDD_DATA_NEW
#define ID_DATA_NEW
#define ID_DATA_NEW
                                                1324
                                               1325
                                               1326
                                               1327
                                               1329
                                                1330
                                               1331
                                               1332
                                               32771
                                                32772
#define ID DATA EDIT
                                               32773
#define ID REC FIRST
                                               32774
#define ID_REC_NEXT
#define ID_REC_PREV
#define ID_REC_LAST
#define ID_BLD_NET_FILE
                                               32775
                                               32776
                                                32777
                                               32778
#define ID EDIT MODE
                                               32779
#define ID_CLR_SUBFIELDS
#define ID_REC_GOTO
                                               32780
      Next default values for new objects
11
#ifdef APSTUDIO INVOKED
#ifndef APSTUDIO READONLY SYMBOLS
            APS_NEXT_RESOURCE_VALUE 142
APS_NEXT_COMMAND_VALUE 32782
APS_NEXT_CONTROL_VALUE 1333
APS_NEXT_SYMED_VALUE
#define
 #define
 #define
 #define
                                                       101
 #endif
 #endif
 //Microsoft App Studio generated resource script.
#include "resource.h"
#define APSTUDIO READONLY SYMBOLS
 11
     Generated from the TEXTINCLUDE 2 resource.
 11
 #include "afxres.h"
 #undef APSTUDIO READONLY SYMBOLS
#ifdef APSTUDIO INVOKED
```

```
11
// TEXTINCLUDE
1 TEXTINCLUDE DISCARDABLE
   "resource.h\0"
END
2 TEXTINCLUDE DISCARDABLE
    "#include "'afxres.h"'\r\n"
    "\0"
END
3 TEXTINCLUDE DISCARDABLE
BEGIN
   #include ""res\\PTDinp.rc2"" // non-App Studio edited
resources\r\n"
   "\r\n"
   "#include "'afxres.rc"" \011// Standard components \r\n" "#include "'afxprint.rc"" \011// printing/print preview
resources\r\n"
   "#include ""afxdb.rc""\011\011// Database resources\r\n"
   "\0"
END
#endif
       //APSTUDIO INVOKED
// Icon
IDR MAINFRAME
           TCON
                   DISCARDABLE "RES\\PTDINP.ICO"
// Bitmap
IDR MAINFRAME
           BITMAP
                       MOVEABLE PURE
                                   "RES\\TOOLBAR.BMP11
IDB BITMAP1
           BITMAP
                       DISCARDABLE
"RES\\BITMA.Pl.BMP"
// Menu
IDR MAINFRAME MENU PRELOAD DISCARDABLE
BEGIN
   POPUP "&File"
   RECIN
       MENUITEM " &Open...\tCtrl+O", MENUITEM SEPARATOR
                              ID FILE OPEN
       MENUITEM "&Print",
                                  ID FILE PRINT
```

1...5

```
MENUITEM "Print &Setup".
                                                           ID FILE PRINT SETUP
             MENUITEM "Print Preview",
                                                           ID FILE PRINT PREVIEW
             MENUITEM SEPARATOR
             MENUITEM "Filel",
                                                    ID FILE_MRU_FILE1, GRAYED
                                                    ID_FILE_MRU_FILE2, GRAYED
ID_FILE_MRU_FILE3, GRAYED
ID_FILE_MRU_FILE4, GRAYED
             MENUITEM "File2",
             MENUITEM "File3",
             MENUITEM "File4",
             MENUITEM SEPARATOR
             MENUITEM "E&xit",
                                                    ID APP EXIT
END
POPUP "&Record"
BEGIN
             MENUITEM %First Record",
                                                          ID_REC_FIRST
ID_REC_PREV
                                             ID_REC_NEXT
ID_REC_LAST
             MENUITEM "&Prev Record",
             MENUITEM %Next Record",
             MENUITEM %Last Record",
             MENUITEM SEPARATOR
             MENUITEM %Go to Record",
                                                          ID REC GOTO
             MENUITEM SEPARATOR
             MENUITEM %Edit Record",
                                              ID_DATA_EDIT
ID_DATA_NEW
             MENUITEM %New Record",
             MENUITEM SEPARATOR
             MENUITEM "Neural &Data",
                                                          ID BLD NET FILE
END
POPUP %Options"
BEGIN
             MENUITEM %Print Full Form",
                                                          ID EDIT MODE
             MENUITEM %Clear Subfields",
                                                         ID CLR SUBFIELDS
END
POPUP %View"
BEGIN
             MENUITEM %Toolbar".
                                                          ID VIEW TOOLBAR
                                                  ID_VIEW_TOOL
ID_VIEW_TOOL
             MENUITEM %Status Bar",
END
POPUP %Help"
BEGIN
            MENUITEM %About PTDinp ", ID APP ABOUT
      END
END
11
// Accelerator
77
IDR MAINFRAME ACCELERATORS PRELOAD MOVEABLE PURE
BEGIN
       "N"
                          ID FILE NEW,
                                                  VIRTKEY, CONTROL
       "0"
                          ID_FILE_OPEN,
ID_FILE_SAVE,
                                                   VIRTKEY, CONTROL
       "S"
                                                   VIRTKEY, CONTROL
                                                  VIRTKEY, CONTROL
       "P"
                          ID FILE PRINT,
       11 7 11
                          ID_EDIT_UNDO,
                                                  VIRTKEY, CONTROL
                         ID EDIT CUT,
ID EDIT COPY
ID EDIT PASTE,
ID EDIT UNDO,
       "X",
                                                  VIRTKEY, CONTROL
       "C"
                                                   VIRTKEY, CONTROL
       "V"
                                                   VIRTKEY, CONTROL
                                                  VIRTKEY, ALT
       VK BACK.
      VK_DELETE, ID_EDIT_COPY,
VK_INSERT, ID_EDIT_COPY,
VK_INSERT, ID_EDIT_PASTE,
                                            VIRTKEY, SHIFT
                                            VIRTKEY, CONTROL
                                            VIRTKEY, SHIFT
                          ID_NEXT_PANE,
       V1_F6
                                                   VIRTKEY
```

```
VK F6,
                        ID PREV PANE,
                                        VIRTKEY.SHIFT
END
//Dialog
11
IDD ABOUTBOX DIALOG DISCARDABLE 34, 22, 217, 55
STYLE DS MODALFRAME I | WS_POPUP | WS_CAPTION | I WS_SYSMENU
CAPTION TABOUT PTDINP"
FONT 8, "MS Sans Serif"
BEGIN
      ICON
                              IDR_MAINFRAME, IDC S TAT IC, 11, 17, 18, 2 0
      LTEXT
                        "Pre Term Delivery Application Version 1. 0",
IDC STATIC,
                              40,10,139,8
      LTEXT
                        "Copyright \251 1997 ", IDC STATIC, 40,25,119,8
                        "OK", IDOK, 175, 32, 32, 14, WS_GROUP
      DEFPUSHBUTTON
END
IDD_D PTD_INP DIALOG DISCARDABLE 0, 0, 399, 447
STYLE-DS_RODALFRAME | WS_POPUP | WS_VISIBLE | WS_CAPTION |
WS SYSMENU
CAPTION "Pre-Term Delivery Risk Assessment Software: Data Entry Screen"
FONT 8, "MS Sans Serif"
BEGIN
      EDITTEXT
                                    IDC LAB ID, 305, 8, 68, 12, ES AUTOHSCROLL
      EDITTEXT
                                    IDC NAME L, 4 6, 4 8, 5 0, 13,
ES AUTOHSCROLL
                                    IDC NAME F, 117, 4 8, 4 0, 13,
      EDITTEXT
ES AUTOHSCROLL
     EDITTEXT
                                    IDC NAME MI,170,48,12,13,ES AUTOHSCROLL
      EDITTEXT
                                    IDC_DATE_OF_BIRTH, 28, 66, 59, 12,
                                    ES AUTOHSCROLL
      CONTROL
                                    "Caucasian", IDC EO WHITE, "Button"
BS_AUTOCHECKBOX |
                                    WS_TABSTOP, 242, 48, 45, 10
      CONTROL
                                    "African American", IDC EO BLACK,
"Button", BS_AUTOCHECKBOX |
                                    WS TABSTOP, 292, 48, 66, 1
     CONTROL
                                    "Asian", IDC EO ASIAN, "Button",
BS AUTOCHECKBOX |
                                    WS_TABSTOP, 362, 48,29,10
      CONTROL
                                    "Hispanic", IDC EO HISPANIC,
"Button", BS AUTOCHECKBOX |
                                    WS TABSTOP, 242, 59, 40, 10
     CONTROL
                                    "Native American", IDC EO NATIVE AMER I
CAN, "Button"
BS AUTOCHECKBOX |
                                    WS TABSTOP, 292, 59, 65, 10
      CONTROL
                                    "Other ", IDC EO OTHER, " Button",
BS AUTOCHECKBOX |
                                    WS TABSTOP, 362, 59, 29, 10
      CONTROL
                                    "Married", IDC_MS_MARRIED, "Button",
BS AUTOCHECKBOX |
                                    WS TABSTOP, 242, 72,36,10
     CONTROL
                                    "Single", IDC_I_MS_SINGLE, "Button",
BS_AUTOCHECKBOX
                                    WS TABSTOP, 262, 72, 34, 10
```

```
"Divorced/Separated", IDC MS DIVORCED, "Button",
BS AUTOCHECKBOX | WS TABSTOP, 316,72,77,10
      CONTROL
                                       "Widowed ".IDC MS WIDOWED. "Button".
BS AUTOCHECKBOX |
                                      WS TABSTOP, 242, 83, 41, 10
      CONTROL
                                      "Living with partner", IDC MS LWP,
"Button",
BS_AUTOCHECKBOX | WS TABSTOP, 287, 83, 73, 10
      CONTROL
                                      "Other", IDC MS OTHER,
"Button", BS AUTOCHECKBOX
                                      WS TABSTOP, 562, 83, 29, 10
      CONTROL
                                       "Yes", IDC_ACOG_Y, "Button",
BS AUTOCHECKBOX | WS TABSTOP, 333,119,24,10
      CONTROL
                                      "No", IDC ACOG N, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 364, 119, 21, 10
      CONTROL
                                      "Uterine contractions with or without
pain".
                                      IDC_PATIENT COMP 1, "Button",
                   WS_TABSTOP, 13, 145, 143, 10 -
" <1", IDC_PC1_LT1, "Button",
BS AUTOCHECKBOX |
      CONTROL
                 | WS TABSTOP, 67,158,20,10
BS AUTOCHECKBOX
      CONTROL
                                      "1-3", IDC_PC1_1_3, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 99,158,22,10
CONTROL

"4-6", IDC_PC1_4_6, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 131,158,22,10
      CONTROL
"7-9", IDC_PC1_7_9, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 67,170,22 10
                                      "10-12 "Button", BS_AUTOCHECKBOX
      CONTROL
WS TABSTOP, 99, 170, 30, 10
      CONTROL
                                      ">12", IDC_PC1_GT12, "Button",
BS AUTOCHECKBOX | WS_TABSTOP, 131, 170, 24, 10
                                      "Vaginal bleeding",
      CONTROL.
IDC_VAGINAL_BLEEDING, "Button"
BS_AUTOCHECKBOX | WS_TABSTOP, 13, 181, 65, 10
      CONTROL
                                      "Trace", IDC VB TRACE, "Button",
BS AUTOCHECKBOX
WS TABSTOP, 23,194,30,10
      CONTROL
                                      "Med"
IDC_VB_MED, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 58,194,25,10
      CONTROL
"Gross", IDC_VB_GROSS, "Button", BS_AUTOCHECKBOX | WS_TABSTOP 88,194,30,10
CONTROL "Patient is not ""feeling
right"", IDC PATIENT COMP 6.
"Button", BS_AUTOCHECKBOX | WS_TABSTOP, 13, 205, 102, 10
      CONTROL
                                      "Bleeding during the second or third
trimester",
                                      IDC PATIENT COMP 3,
Button", BS AUTOCHECKBOX | WS_TABSTOP, 161 145, 155 10
      CONTROL
                                      "Intermittent lower abdominal pain,
dull, low backpain, pelvic press ure",
IDC PATIENT COMP 2, "Button", BS_AUTOCHECKBOX | WS TABSTOP, 161,157,233,10
      CONTROL
                                      "Change in vaginal discharge -
amount, color, or consistency",
                                      IDC PATIENT COMP 5, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 161 181,208 10
      CONTROL
                                      "Menstrual - like cramping (with or
without diarrhea) ".
                                      IDC PATIENT COMP 4, "Button",
BS_AUTOCHECKBOX | WS TABSTOP, 161 193,171 10
```

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EDITTEXT
                                       IDC EGA BY SONO, 155,224,37,12.
ES_AUTOHSCROLL
EDITTEXT
                                       IDC EGA BY LMP.
245,224,37,12,ES AUTOHSCROLL
EDITTEXT
                                       IDC_EG_AT_SAMP,
350,224,37,12,ES_AUTOHSCROLL
      CONTROL
                                       "Previous pregnancy, no
complications", IDC 1 COMP.
"Button", BS AUTOCHECKBOX | WS TABSTOP, 13, 260, 134,10
      CONTROL
                                       "History of Preterm
delivery",IDC 2_COMP,"Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 13, 272, 134, 10
      CONTROL
                                       "1"
IDC_2_COMP_1, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 91, 284, 19, 10 -
      CONTROL
                                       "1", IDC 2 COMP 2, "Button",
BS AUTOCHECKBOX | WS TABSTOP, 116, 284 19,10
      CONTROL
                                       ">2", IDC_2_COMP_3, "Button",
BS AUTOCHECKBOX | WS TABSTOP, 141,284, 21, 10
      CONTROL
                                       "History of Preterm
PROM", IDC 3 COMP, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP, 13, 296, 92, 10
      CONTROL
                                       "History of incompetent cervix",
IDC 4_COMP, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP,13, 308, 106,10
      CONTROL
                                       "HIstory of PIH/preeclampsia".
IDC 5 COMP, "Button",
BS AUTOCHECKBOX | WS TABSTOP, 13 , 320, 102, 10
      CONTROL
                                       "History of SAB prior to 20 wks",
IDC 6_COMP, "Button",
BS_AUTOCHECKBOX | WS_TABSTOP,13,332, 109, 10
EDITTEXT
                                       IDE_GRAVIDITY, 277, 246,20, 12,
ES AUTOHSCROLL
EDITTEXT
                                       IDC PARITY, 317, 246, 20, 12
ES AUTOHSCROLL
EDITTEXT
                                       IDC_ABORTIONS, 357, 246, 20, 12,
ES_AUTCHSCROLL
      CONTROL
                                       "Multiple
Gestation:", IDC_MULT_GEST, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 23, 272, 72, 10
      CONTROL
                                       "Twins", IDC_MG_TWINS, "Button",
BS AUTOCHECKBOX | WS_TABSTOP, 278, 272,30,10
                 "Triplets", IDC_MG_TRIPLETS, "Button", WS_TABSTOP, 311, 272, 36, 10
      CONTROL
BS_AUTOCHECKBOX
      CONTROL
                                       "Quads", IDC_MG_QUADS, "Button",
                 WS TABSTOP,550, 272, 32, 10
BS AUTOCHECKBOX
      CONTROL
                                       "Uterine or cervical abnormality",
IDC_UT_CWRV_ABNORM, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 203,
284,110,10
      CONTROL
                                       "Cerclage", TDC CERV CERCLAGE,
"Button", BS_AUTOCHECKBOX | WS_TABSTOP, 203, 296, 40, 10
      CONTROL
                                       "Gestational
Diabetes", IDC GEST DIABETES, "Button"
BS_AUTOCHECKBOX | WS_TABSTOP, 203, 308, 79, 10
      CONTROL
                                       "Hypertensive Disorders",
IDC_HYPERTEN_DISORDERS, "Button", BS_AUTOCHECKBOX | WS_TABSTOP, 203, 320,
      CONTROL
                                       "1", IDC DILITATION LT1, "Button",
BS AUTOCHECKBOX
                     WS_TABSTOP, 58, 364, 22, 10
      CONTROL.
                                       "1", IDC_DILITATION_1, "Button",
                 WS TABSTOP, 81, 364, 24, 10
BS AUTOCHECKBOX
```

```
CONTROL
                                           "1-2", IDC_DILITATION_1_2, "Button",
BS AUTOCHECKBOX
                      WS_TABSTOP 101, 364, 24, 10
"2", IDC_DILITATION_2, Button",
       CONTROL
BS AUTOCHECKBOX
                    WS TABSTOP, 127, 364, 18, 10
       CONTROL
                                           "2-3", IDC_DILITATION_2 3, "Button",
BS AUTOCHECKBOX
                        WS_TABSTOP 147, 364, 24,10
       CONTROL
                                           "3", IDC DILITATION 3, "Button",
                        WS_TABSTOP, 173, 364, 18, 10
BS AUTOCHECKBOX
                       ->3 ", IDC DILITATION_GT3, "Button",
WS_TABSTOP, 193, 364, 22, 10
"Unk. ", IDC DILITATION_UKU, "Button",
WS_TABSTOP, 217, 364, 29, 10
       CONTROL
BS AUTOCHECKBOX
       CONTROL
BS AUTOCHECKBOX
                       MS_TABSTOP, 31, 564, 25, 10

MS_TABSTOP, 316, 564, 25, 10

MS_TABSTOP, 34, 364, 25, 10

MS_TABSTOP, 34, 364, 25, 10

"Soft", IDC_CERV_MOD, "Button", "Soft", "DC_CERV_SOFT, "Button",
       CONTROL
BS AUTOCHECKBOX
       CONTROL
BS AUTOCHECKBOX
       CONTROL
                        WS_TABSTOP,370, 64, 25, 10
BS AUTOCHECKBOX
                                           "Antibiotics", IDC ANTIBIOTICS, "Button",
       CONTROL
                        WS_TABSTOP, 17, 392, 45, 10

"Corticosteroids", IDC CORTICOSTEROIDS.
BS AUTOCHECKBOX
       CONTROL
"Button"
BS_AUTOCHECKBOX
                       WS_TABSTOP, 70, 392, 60, 10
       CONTROL
                                           "Tocolytis", IDC TOCOLYTICS, "Button",
BS AUTOCHECKBOX
                        WS_TABSTOP, 138, 592, 41, 10
       CONTROL
                                           "Insulin", IDC_INSULIN, "Button",
BS AUTOCHECKBOX
                        WS_TABSTOP, 187, 392, 33, 10
       CONTROL
                                           "Antihypertensive ", IDC ANTIHYPER,
"Button",
BS AUTOCHECKBOX
                       WS_TAESTOP, 228, 392, 69, 10
       CONTROL.
                                           "None", IDC MED NONE, "Button",
BS_AUTOCHECKBOX
                       WS TABSTOP, 305, 392, 29, 10
       CONTROL
                                           "Unknown", IDC_MED_UKN, "Button",
BS AUTOCHECKBOX
                        WS_TABSTOP, 342, 392, 42, 10
                                           "Positive", IDC_FFN_POS, "Button",
       CONTROL
BS AUTOCHECKBOX
                        WS TABSTOP, 138, 411, 37, 10
       CONTROL
                                           "Negative", IDC FFN NEG, "Button",
BS AUTOCHECKBOX
                       WS TABSTOP, 228, 411, 41, 10
       DEFPUSHBUTTON
                                           "Calculate Risk", IDOK, 270, 429, 62, 14
                                           "Cancel". IDCANCEL, 340,429, 53,14
       PUSHBUTTON
       LTEXT
                                           "Cervical consistancy", IDC STATIC,
249, 365, 68, 8
       LTEXT
                                           "M", IDC_STATIC, 160,51,7,8
       LTEXT
                                           "Lab ID #:11, IDC STATIC, 267, 10, 34,
       LTEXT
                                           "PATIENT INFORMATION", IDC STATIC, 159.
29, 83, 8
       LTEXT
                                           "Name (last) ", IDC STATIC, 7, 51, 36,
8
                                           "First", IDC_STATIC, 99, 51, 15, 8
"", IDC_STATIC, 1,40,187,56
"",IDC_STATIC, 187,40,210,56
       LTEXT
       GROUPBOX
       GROUPBOX
       LTEXT
                                           "Ethnic origin: ", IDC STATIC, 192, 48,
44. 8
                                           "Marital
status: ", IDE_STATIC, 192, 72, 47, 8
       LTEXT
                                           "DOB", IDC STATIC, 7, 69, 16, 8
       LTEXT
                                           "PATIENT HISTORY AND CLINICAL
INFORMATION", IDC_STATIC, 117, 102, 168, 8
       GROTTPROX
                                                  "", IDC STATIC, 1, 112, 396, 107
```

```
"At the time of sampling was the
patient experiencing signs and sysptoms of possible preterm labor?",
                                           IDC STATIC, 7, 119, 321, 8
                                           "If yes, please mark all that apply.
       LTEXT
IDC STATIC, 7, 134,109, 8
       GROUPBOX
                                                  ", IDC STATIC, 1, 373, 396, 32
       LTEXT
                                           "Qualitative fFN Elisa Test Results:
IDC_STATIC, 7, 411,118, 8
       GROUPBOX
                                                  IDC STATIC, 1, 402,396,24
       LTEXT
                                           "Medications at Time of Test (check all
that apply) ",
                                                  IDC STATIC, 7, 380, 163, 8
       LTEXT
                                           "Number/hr", IDC_STATIC, 22, 158, 36, 8
       GROUPBOX
                                                 " ", IDC_STATIC,1,216,396,25
       LTEXT
                                           "Gestational Age: EGA by first
trimester sono",
                                          IDC STATIC, 7, 225, 143, 8
       LTEXT
                                           "EGA by LMP", IDC STATIC, 197, 225, 42,
8
       LTEXT
                                          "EGA at sampling",
IDC STATIC, 287, 225, 55, 8
       GROUPBOX
                                                 " ",IDC_STATIC,1,346,396,30
       LTEXT
                                          "Cervical Status immediately following
sample collection: ".
                                          IDC STATIC, 7, 352, 182, 8
       LTEXT
                                          "Dilatation (cm)", IDC_STATIC,
9,364,48,8
       GROUPBOX
                                                  " ",IDC_STATIC, 1, 238,187, 111
" ",IDC_STATIC,187,238,210,111
       GROUPBOX
       CONTROL
                                                  "Previous Pregnancy: Please mark
all that apply.",
                                          IDC_STATIC, "Static", SS LEFTNOWORDWRAP
WS_GROUP, 7, 249, 159, 8
      LTEXT
                                          "Current Pregnancy:
G: ", IDC STATIC, 195, 249, 76, 8
       GROUPBOX
                                                  " ",IDC_STATIC,1,93,396,22
                                          ", IDC_STATIC,1,39,38,28,28", IDC_STATIC,1,20,396,23
"P: ", IDC_STATIC,1,20,396,23
"P: ", IDC_STATIC,303,249,8,8
"A: ", IDC_STATIC,343,249,8,8
       GROUPBOX
      GROUPBOX
       LTEXT
       LTEXT
       LTEXT
                                          "If Yes, how many?", IDC STATIC, 22,
284, 61, 8
EMD
IDD GOTO DIALOG DISCARDABLE 0, 0, 163, 95
STYLE DS MODALFRAME | WS POPUP | WS VISIBLE | WS_CAPTION |
WS_SYSMENU CAPTION "GO TO RECORD ... "
FONT 8, "MS Sans Serif"
BEGIN
      CONTROL
                                                 "Record Number", IDC R GOTO SEL1,
"Button".
BS_AUTORADIOBUTTON | WS_GROUP, 10, 16, 62, 10
       CONTROL
                                                 "ID Number", IDC R GOTO SEL2,
"Button", BS_AUTORADIOBUTTON, 10, 40, 46, 10
       EDITTEXT
                                                 IDC E GOTO REC NUM.
90,12,60,12,ES_AUTOHSCROLL
      EDITTEXT
                                                 IDC_E_GOTO_ID_RUM, 90, 36, 60,
12, ES_AUTOHSCROLL
      DEFPUSHBUTTON
                                          "Ok", IDOK,, 76, 50, 14
      PUSHBUTTON
                                          "Cancel", IDCANCEL, 100, 76, 50, 14
END
```

```
//
   String Table
STRINGTABLE PRELOAD DISCARDABLE
BEGIN
      IDR MAINFRAME
                                    "PTDine Windows
Application\nPTDin\nPTDin Document\n\n\nPTDin. Document\ nPTDin Document"
STRINGTABLE PRELOAD DISCARDABLE
BEGIN
      AFX_IDS_APP_TITLE
AFX_IDS_IDLEMESSAGE
                                    "PTDinp Windows Application"
                                   "Ready
END
STRINGTABLE DISCARDABLE
BEGIN
      ID INDICATOR EXT
                                   "EXT"
      ID INDICATOR CAPS
                                   "CAP"
      ID INDICATOR NUM
                                   "NUM"
      ID_INDICATOR_SCRL
ID_INDICATOR_OVR
                                   "SCRL"
                                   "OVR"
      ID INDICATOR REC
                                   "REC"
END
STRINGTABLE DISCARDABLE
REGIN
      ID FILE NEW
                                   "Create a new document"
      ID FILE OPEN
                                         "Open an existing document"
     ID_FILE_CLOSE
ID_FILE_SAVE
ID_FILE_SAVE_AS
                                         "Close the active document"
                                         "Save the active document"
                                   "Save the active document with a new
name"
      ID_FILE_PAGE_SETUP
                                         "Change the printing options"
      ID FILE PRINT SETUP
                                         "Change the printer and printing
options'
      ID FILE PRINT
                                         "Print the active document"
      ID FILE PRINT PREVIEW
                                   "Display full pages"
END
STRINGTABLE DISCARDABLE
BEGIN
      ID APP ABOUT
                                         "Display program information.
version number and copyright"
     ID_APP_EXIT
                                   "Quit the application; prompts to save
documents"
END
STRINGTABLE DISCARDABLE
BEGIN
      ID FILE MRU FILEI
                                   "Open this document"
     ID FILE MRU FILE2
ID FILE MRU FILE3
ID FILE MRU7 FILE4
                                   "Open this document"
                                   "Open this document"
                                         "Open this document"
END
STRINGTABLE DISCARDABLE
BEGIN
      ID NEXT PANE
                                         "Switch to the next window pane"
```

ID PREV PANE "Switch back to the previous window pane" END STRINGTABLE DISCARDABLE BEGIN ID EDIT CLEAR "Erase the selection" ID EDIT CLEAR ALL ID EDIT COPY "Erase everything" "Copy the selection and put it on the Clipboard"
ID\_EDIT\_CUT "Cut the selection and put it on the Clipboard" ID\_EDIT\_FIND "Find the specified text" ID EDIT PASTE
ID EDIT REPEAT
ID EDIT REPLACE "Insert Clipboard contents" "Repeat the last action" "Replace specific text with different text" ID\_EDIT\_SELECT\_ALL ID\_EDIT\_UNDO ID\_EDIT\_REDO "Select the entire document?1 "Undo the last action" "Redo the previously undone action" END STRINGTABLE DISCARDABLE BEGIN ID VIEW TOOLBAR "Show or hide the toolbar" ID VIEW STATUS BAR "Show or hide the status bar" END STRINGTABLE DISCARDABLE BEGIN AFX\_IDS\_SCSIZE AFX\_IDS\_SCMOVE "Change the window size" "Change the window position" AFX IDS SCMINIMIZE "Reduce the window to an icon" AFX IDS SCMAXIMIZE "Enlarge the window to full size" AFX\_IDS\_SCNEXTWINDOW AFX\_IDS\_SCPREVWINDOW "Switch to the next document window" "Switch to the previous document window! AFX\_IDS\_SCCLOSE save the documents" "Close the active window and prompts to END STRINGTABLE DISCARDABLE REGIN AFX\_IDS\_SCRESTORE "Restore the window to normal size" AFX IDS SCTASKLIST "Activate-Task List" STRINGTABLE DISCARDABLE BEGIN IDD\_DATA\_NEW "Starts data entry process for new record" ID\_DATA\_NEW "Create new record at end of file and ID\_DATA\_EDIT "Edit the cturrently selected record. " ID REC TIRST "Go to the first record in the ID REC NEXT "Go to the next record in the file." ID\_REC\_PREV "Go to the previous record in the

shell. lib

```
ID REC LAST
                               "Go to the last record in the file."
     ID BID NET FILE
                               "Build file of neural data from
currently opened database."
     ID EDIT MODE
                                    "Print the full data form when
checked or results only when unchecked."
     ID_CLR_SUBFIELDS
                               "Clear subfields when item cleared."
                               "Go to a specific record number or
specific ID."
END
#ifndef APSTUDIO INVOKED
11
   Generated from the TEXTINCLUDE 3 resource.
11
#include "res\PTDinp.rc2" // non-App Studio edited resources
#include "afxres.rc"
                          // Standard components
#include "afxprint.rc" // printing/print preview resources
#include "afxdb.rc"
                         // Database resources
// not APSTUDIO INVOKED
# Microsoft Visual C++ generated build script - Do not modify
PROJ = PTDINP
DEBUG = 0
PROGTYPE = 0
CALLER =
ARGS =
DLLS =
D RCDEFINES = /d DEBUG
R RCDEFINES = /dnDEBUG
ORIGIN = MSVC
ORIGIN_VER = 1.00
PROJPATH = C:\DDD\AD97-1\PTDINP\
USEMFC = 0
CC = c1
CPP = cl
CXX = c1
CCREATEPCHFIAG =
CPPCREATEPCHFLAG = /YcSTDAFX.H
CUSEPCHFLAG =
CPPUSEPCHFLAG = /YuSTDAFX.H
FIRSTC =
FIRSTCPP = STDAFX.CPP
RC = rc
CFLAGS D = WEXE = nologo /G2 /W3 /V /AL /Od /D " AFXDLL" /D " DEBUG" /FR
/GA /GEf
CFLAGS R = WEXE = /nologo /Gs /G3 /W3 /AL /01 /D "RDEBUG" /D AFXDLL" /FR
/GA /GEf
LFLAGS_D = WEXE = NOLOGO /NOD /PACKC:61440 /STACK:10240 /ALIGN:16 /ONERROR:
NOEXE/ CO
LIBS D WRXE = mfc250d oldnames libw llibcew mfcd250d commdlg.lib shell.lib,
LIBS_R_WEXE = mfc250 oldnames libw llibcew mfcd250 odbc commdlg.lib
```

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Service again, some name and the same and th
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```
RCFLAGS = /nologo /z
RCFLAGS = /nologo /t /k
RUNFLAGS =
DEFFILE = PTDINP.DEF
OBJS EXT =
LIBS EXT = EVA.LNET LIB TKSDLL.LIB
!if "$(DEBUG) " = = "1"
CFLAGS = $ (CFLAGS D WEXE)
LFLAGS = $(LFLAGS D WEXE)
LIBS = $(LIBS_D_W\overline{I}X\overline{E})
MAPFILE = nul
RCDEFINES = $ (D RCDEFINES)
!else
CFLAGS = $(CFLAGS_R_WEXE)
LFLAGS = $(LFLAGS_R_WEXE)
LIBS = $(LIBS R WEXE)
MAPFILE = nul
RCDEFINES = $(R_RCDEFINES)
!if (if exist MSVC.BND del MSVC.BND]
lendif
SBRS =
             STDAFX.SBR \
             PTDINP.SBR \
             MAINFRM.SBR
             PTDIDOC.SBR \
             PTDIVW.SBR \
             PTDDLG1.SBR \
             PTDGOTO.SBR
EVA_LNET DEP =
TKSDLL_DEP =
PTDINP RCDEP
                   = c:\ddd\ad97-1\ptdinp\res\ptdinp.ico
      c:\ddd\ad97-1\ptdinp\res\ptdinp.rc2
STDAFX_DEP = c:\ddd\ad97-1\ptdinp\stdafx.h
PTDINP_DEP = c:\ddd\ad97-1\ptdinp\stdafx.h
      c:7ddd\ad97-1\ptdinp\ptdinp.h
      c:\ddd\ad97-1\ptdinp\ptdidoc.h
      c:\ddd\ad97-1\ptdinp\mainfrm.h
      c:\ddd\ad97-1\ptdinp\ptdivw.h
MAINFM_EP = c:\ddd\ad97-1\ptdinp\stdafx.h
      c:\3dd\ad97-1\ptdinp\ptdinp.h
      c:\ddd\ad97-1\ptdinp\ptdidoc.h
      c:\ddd\Ad97-1\ptdinp\mainfrm.h
PTDIDOC_EP - c:\ddd\ad97-1\ptdinp\stdafx.h
      c:\3dd\ad97-1\ptdinp\ptdinp.h
      c:\ddd\ad97-1\ptdinp\ptdidoc.h
      c:\ddd\ad97-1\ptdinp\aa_nets.h
PTDIVW EP = c:\ddd\ad97-1\ptdinp\stdafx.h
      c:7ddd\ad97-1\ptdinp\ptdinp.h \
      c:\ddd\ad97-1\ptdinp\ptdidoc.h
      c:\ddd\ad97-1\ptdinp\ptdivw.h \
      c:\ddd\ad97-1\ptdinp\ptddlgl.h
PTDDLG1_EP = c:\ddd\ad97-1\ptdinp\stdafx.h
```

```
c:\add\ad97-1\ptdinp\ptdinp.h
      c:\ddd\ad97-1\ptdinp\ptdidoc.h
      c:\ddd\ad97-1\ptdinp\ptddlgl.h
all: $(PROJ).EXE $(PRCJ).BSC
PTDINP.RES: PTDINP.RC S(PTDINP RCDEP)
      $(RC) $(RCFLAGS) $(RCDEFINES) -r PTDINP.RC
STDAFX.OBJ: STDAFX.CPP S(STDAFX DEP)
      $ (CPP) $ (CFLAGS) $ (CPPCREATEPCHFLAG) /c STDAFX.CPP
PTDINP.OBJ: PTDINP.CPP $ (PTDINP DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c PTDINP.CPP
MAINFRM.OBJ:
                         MAINFRM.CPP $ (MAINFRM DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c MAINFRM.CPP
PTDIDOC.OBJ:
                         PTDIDOC.CPP $ (PTDIDOC DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c PTDIDOC.CPP
PTDIVW.OBJ: PTDIVW.CPP $(PTDIVW DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c PTDIVW.CPP
PTDDLG1.OBJ:
                  PTDDLGI.CPP $(PTDDLG1_DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c PTDDLG1.CPP
PTDGOTO.OBJ:
                         PTDGOTO.CPP $ (PTDGOTO DEP)
      $(CPP) $(CFLAGS) $(CPPUSEPCHFLAG) /c PTDGOTO.CPP
$(PROJ).EXE::
                         PTDINP.RES
$(PROJ).EXZ::
                         STDAFX.OBJ PTDINP.OBJ MAINFRM.OBJ PTDIDOC.OBJ
PTDIVW.OBJ PTDDLG1.OBJ
PTDGOTO.OBJ $(OBJS_XT) $(DEFFILE)
echo >KUL @<<$(PRO'j).CRF
STDAFX.OBJ +
PTDINP.OBJ +
MAINFM.OBJ +
PTDIDOC.OBJ +
PTDIVW.OBJ +
PTDDLG1.OBJ +
PTDGOTO.OBJ +
$ (OBJS_EXT)
$ (PROJ) .EXE
S (MAPFILE)
c:\msvc\lib\+
c:\msvc\mfc\lib\+
EVALNET.LIB+
TKSDLL.LIB+
S(LIBS)
$ (DEFFILE) ;
~
      link $(LFLAGS) @$(PROJ).CRF
      $(RC) $(RESFLAGS) PTDINP.RES $@
      @copy $ (PROJ) . CRF MSVC . BND
$(PROJ).EXE::
                        PTDINP.RES
      if not exist MSVC.BND
                                     $(RC) $(RESFLAGS) PTDINP.RES $@
```

```
run: $(PROJ).EXE
             $(PROJ) $(RUNFLAGS)
 $(PROJ).BSC: $(SBRS)
            bscmake @<<
 /o$@ $ (SBRS)
 ~
        PTDidoc.h : interface of the CPTDinpDoc class
 11
 #ifndef _PTDINPDOC_H_
#define PTDINPDOC_H
 #define REC LENGTH 330L
class CPTDinpDoc : public CDocument
protected: // create from serialization only
            CPTDinpDoco;
            DECLARE DYNCREATE (CPTDinpDoc)
//Attributes public:
public:
            CString m LAB ID:
            CString m NAME L;
            CString m, NAME F;
CString m NAME MI;
            CString m, DATE_OF_DATA ENTRY;
                                                                                              //time
            double m PATIENT AGE:
            CString m_DATE OF BIRTH;
           CSCIING M_DATE OF BIRH!;
CSCIING M_DATENTC ORIGIN WHITE;
CSCIING M_ETHNIC ORIGIN BLACK;
CSCIING M_ETHNIC ORIGIN ASIAN;
CSCIING M_ETHNIC ORIGIN ASIAN;
CSCIING M_ETHNIC ORIGIN HISPANIC;
CSCIING M_ETHNIC ORIGIN MATIVE AMERICAN;
CSCIING M_ETHNIC ORIGIN OTHER;
CSCIING M_MARIAL STATUS_SINGLE;
            CString m_MARITAL STATUS MARRIED;
            CString m_MARITAL_STATUS_DIVORCED;
CString m_MARITAL_STATUS_WIDOWED;
CString m_MARITAL_STATUS_LWP;
            CString m MARITAL STATUS OTHER;
            CString m_ACOG_SYNPTOMS;
           CSTring m_ACUG_SYMPTOMS;
CString m_PATIENT_COMPLAINT_1, 3;
CString m_PATIENT_COMPLAINT_1 10 12;
CString m_PATIENT_COMPLAINT_1 10 12;
CString m_PATIENT_COMPLAINT_1 46;
CString m_PATIENT_COMPLAINT_1 79;
CString m_PATIENT_COMPLAINT_1 5TT12;
CString m_PATIENT_COMPLAINT_1 5TT12;
            Cstring m VAGINAL BLEEDING;
CString m VAGINAL BLEEDING TRACE;
CString m VAGINAL BLEEDING MEDIUM;
CString m VAGINAL BLEEDING MEDIUM;
CString m PATIENT COMPLAINT 6;
CString m PATIENT COMPLAINT 3;
CString m PATIENT COMPLAINT 2;
CString m PATIENT COMPLAINT 5;
CString m PATIENT COMPLAINT 4;
```

```
CString m EGA BY SONO;
CString m. EGA BY LMP;
CString m EGA AT SAMPLING;
CString m_0_COMP;
CString m 1 COMP;
CString m 2 COMP;
Cstring m 3 COMP;
CString m 4 COMP;
CString m 5 COMP;
CString m 6 COMP;
CString m 2 COMP 1;
CString m 2 COMP 2;
CString m 2 COMP 3;
Cstring r_GRAVITY;
Cstring r_PARITY;
Cstring r_ABORTIONS;
CString m MULTIPLE GESTATION;
CString r_MULTIPLE_GESTATION_TWINS;
CString m MULTIPLE GESTATION TRIPLETS;
CString m MULTIPLE GESTATION QUADS;
CString m UTCERV ABNORMALITY;
CString r_CERVICT_L_CERCLAGE;
CString m_GESTATIONAL_DIABETES;
CString m_HYPERTENSIVE_DISORDERS;
CString m DILITATION LT1;
CString m DILITATION 1;
CString m_DILITATION_1_2;
CString m_DILITATION_2;
CString m_DILITATION_2_3;
CString m_DILITATION_3;
CString m DILITATION GT3;
CString m DILITATION UNKNOWN;
CString m_CERVICAL_CONSISTANCY_FIRM;
CString m_CERVICAL_CONSISTANCY_MOD;
CString m_CERVICAL_CONSISTANCY_SOFT;
CString m ANTIBIOTICS;
CString m CORTICOSTEROIDS;
CString m_TOYOLYTICS;
CString m_INSULIN;
CString m ANTIHYPERTENSIVES;
CString m MEDICATIONS NONE;
CString m_MEDICATIONS_UNKNOWN;
CString r_FFN RESULT;
char Rec[REC LENGTH + 16];
char
        fld[256];
char
       PathName[128];
long CurRecord:
long NumRecords;
int
        GotoMode;
CString IDStr;
char tstr[2561;
Ctime tim:
char NetName[128];
char NetRec[1024];
double m NetPosl:
double M NetNegl;
double m_NetVall;
double m_7NetPos2;
double m_7NetNeg2;
```

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m

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```
double m NetVal2;
double m_NetPos3;
double m NetNeg3;
double m NetVal3;
// Operations
public:
void get rec ( char* pRec);
char* get - fld(char* pRec, int ofs, int len);
CTime& gei time f ld (char* pRec, int of s, int len)
void put rec(char* pRec);
void put fld (char* pRec, CString& dat, int of s, int len)
void put_dbl fld (char* pRec, double dat, int of s, int len); void put_tet fld (char* pRec, double dat, int of s, int len); void put_time f ld (char* pRec, CTime& dat, int of s, int len) void put_time f ld (char* pRec, CTime& dat, int of s, int len) void InitializeRec(void); void LoadNets(void);
void
               FreeNets(void);
void
               RunNets(long n);
               time2str( const CTime& tm);
char*
CTime& str2time( CString& str);
void get-file( void):
        Implementation
public:
        virtual ~CPTDinpDoc();
        virtual void Serialize(CArchive& ar);
                                                            // overridden for document
i/o
#ifdef DEBUG
        virtual void AssertValid ( ) const;
        virtual void Dump(CDumpContext& dc) const;
#endif
        virtual BOOL OnNewDocument ( );
        Generated message map functions
protected:
        //{{AFX_MSG(CPTDinpDoc)
        afx msg void OnRecFirst ( );
        afx msg void OnRecLast ( ):
        afx msg void OnRecNext ( );
        afx_msg_void OnRecPrev ();
afx_msg_void OnFileOpen ();
        afx msg void OnBldNetFile ( );
        afx_msg_void OnRecGoto ( );
        afx_msg_void OnFileMruFile1();
afx_msg_void OnFilemruFile2();
afx_msg_void OnFileMruFile3();
        afx msg void OnFilemruFile4();
        //}}AFX_MSG
DECLARE MESSAGE MAP()
};
#endif // PTDINPDOC H
```